EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	169154	phospholipid distearoylphosphatidylethanolamine (polyoxypropylene or polyoxyethylene)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2007/06/21 12:13
L2	662	phospholipid distearoylphosphatidylethanolamine (polyoxypropylene or polyoxyethylene)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	AND	ON	2007/06/21 12:13
L3	18	phospholipid (succinyldistearoylphosphatidylethanolamine or distearoylphosphatidylethanolamine) (polyoxypropylene or polyoxyethylene) monomethyl	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	AND	ON	2007/06/21 12:16
L4	662	phospholipid (succinyldistearoylphosphatidylethanolamine or distearoylphosphatidylethanolamine) (polyoxypropylene or polyoxyethylene)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	AND	ON	2007/06/21 12:17
L5	23635	lipid membrane (pharmaceutical or medicament) surfactant	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	AND	ON	2007/06/21 12:18
L6	643	l5 and l4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	AND	ON	2007/06/21 12:18
L7	17	l3 and l5	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	AND	ON	2007/06/21 12:20
L8	0	(("1999313828") or ("1998085969")).PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	OFF	2007/06/21 12:21

EAST Search History

L9	0	(("19990313828") or ("1998085969")).PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	OFF	2007/06/21 12:21
L10	0	(("19990313828") or ("19980085969")).PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	OFF	2007/06/21 12:21
L11	0	(("199900313828") or ("19980085969")).PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	OFF	2007/06/21 12:21
L12	0	(("1999313828") or ("199885969")).PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	OFF	2007/06/21 12:21
L13	2	("2002147136").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	OFF	2007/06/21 12:21
L14	2	("20020147136").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	OFF	2007/06/21 12:22
L15	2	("20020071843").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	OFF	2007/06/21 12:22
L16	3	("2002071843").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	OFF	2007/06/21 12:23

EAST Search History

L17	2	("20020147136").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	OFF	2007/06/21 12:23
L18	3	("2002036161").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	OFF	2007/06/21 12:23
L19	2	("20020036161").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	OFF	2007/06/21 12:24
L20	1	("200236161").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	OFF	2007/06/21 12:25
L21	2	("6139819").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	OFF	2007/06/21 12:25
L22	0	("1996012353").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	OFF	2007/06/21 12:26
L23	3	("9731624").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	OFF	2007/06/21 12:26
L24	2	("5554728").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	OFF	2007/06/21 12:26

EAST Search History

L25	2	("0307175").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	OFF	2007/06/21 12:27
L26	4	("4423038").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	OFF	2007/06/21 12:28
L27	0	("200384576").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	OFF	2007/06/21 12:28
L28	0	("200384574").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	OFF	2007/06/21 12:28
L29	4	("2003084574").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	OFF	2007/06/21 12:28
L30	3	(("2003440201") or ("2002360821")).PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	OFF	2007/06/21 12:29
L31	0	(("20030440201") or ("20020360821")).PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	OFF	2007/06/21 12:29
L32	0	(("200300440201") or ("200200360821")).PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	OFF	2007/06/21 12:29

EAST Search History

L33	2	("5614214").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	OFF	2007/06/21 12:30
L34	4	("9611670").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	OFF	2007/06/21 12:30
L35	41	l13 l14 l15 l16 l17 l18 l19 l20 l21 l23 l24 l25 l26 l29 l30 l33 l34	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2007/06/21 12:32
L36	1	l35 and l7	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2007/06/21 12:33
L37	2	l35 and l6	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2007/06/21 12:35
L38	0	"1997932273"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2007/06/21 12:36
L39	0	"19970932273"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2007/06/21 12:36
L40	0	"199700932273"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2007/06/21 12:36

JC 6/21/07
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NEWS 12	MAY 01	New CAS web site launched
NEWS 13	MAY 08	CA/CAplus Indian patent publication number format defined
NEWS 14	MAY 14	RDISCLOSURE on STN Easy enhanced with new search and display fields
NEWS 15	MAY 21	BIOSIS reloaded and enhanced with archival data
NEWS 16	MAY 21	TOXCENTER enhanced with BIOSIS reload
NEWS 17	MAY 21	CA/CAplus enhanced with additional kind codes for German patents
NEWS 18	MAY 22	CA/CAplus enhanced with IPC reclassification in Japanese patents
NEWS 19	JUN 18	CA/CAplus to be enhanced with pre-1967 CAS Registry Numbers

NEWS EXPRESS NOVEMBER 10 CURRENT WINDOWS VERSION IS V8.01c, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 25 SEPTEMBER 2006.

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FILE 'HOME' ENTERED AT 10:51:51 ON 21 JUN 2007

=> file registry

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

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=>
Uploading C:\Documents and Settings\jcho2\My Documents\10549630-i.str

L1 STRUCTURE UPLOADED

=> file registry
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	2.25	2.46

FILE 'REGISTRY' ENTERED AT 10:55:01 ON 21 JUN 2007
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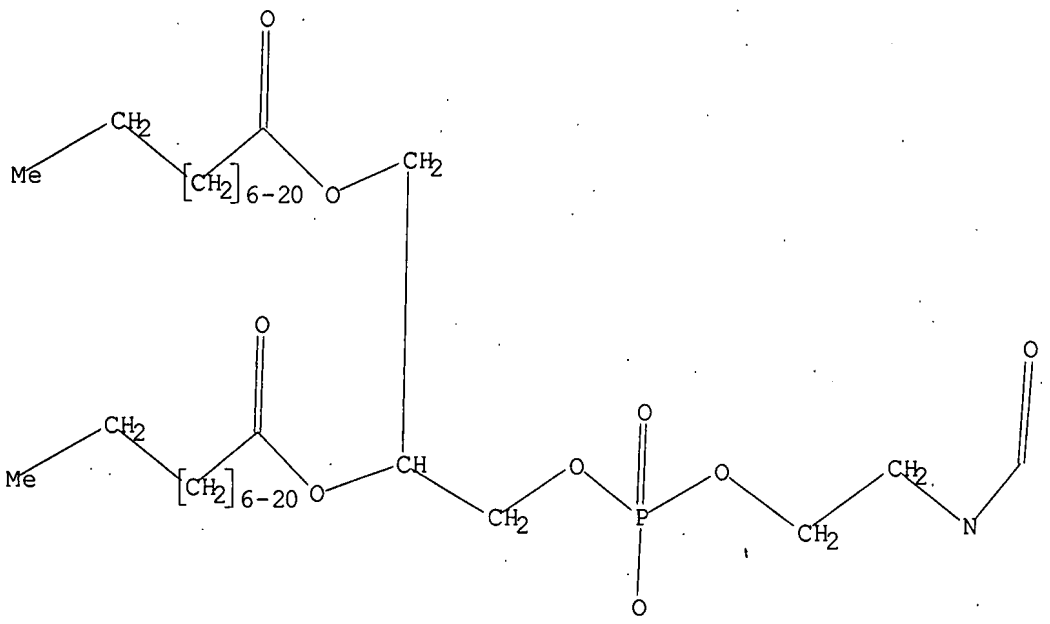
=>
Uploading C:\Documents and Settings\jcho2\My Documents\10549630-j.str

L2 STRUCTURE UPLOADED

=> d l2
L2 HAS NO ANSWERS
L2 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l2 sss full
FULL SEARCH INITIATED 10:55:41 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 3227 TO ITERATE

100.0% PROCESSED 3227 ITERATIONS 1113 ANSWERS
SEARCH TIME: 00.00.01

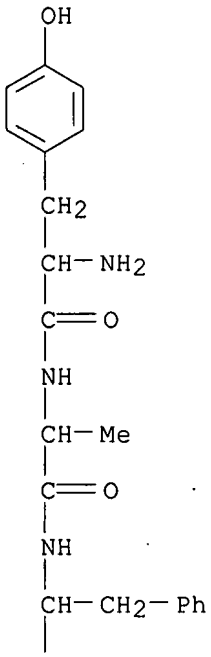
L3 1113 SEA SSS FUL L2

=> d scan

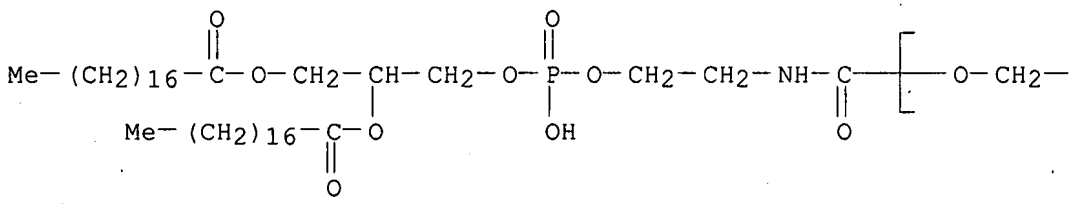
L3 1113 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN Poly(oxy-1,2-ethanediyl), α-[6-hydroxy-6-oxido-1,12-dioxo-9-[(1-oxooctadecyl)oxy]-5,7,11-trioxa-2-aza-6-phosphanonacos-1-yl]-ω-hydroxy-, 8-ether with L-tyrosyl-D-alanyl-L-phenylalanylglycyl-L-tyrosyl-L-prolyl-L-seryl-S-[1-[3-[(2-hydroxyethyl)amino]-3-oxopropyl]-2,5-dioxo-3-pyrrolidinyl]-L-cysteine (9CI)
SQL 8
MF (C2 H4 O)n C94 H146 N11 O25 P S
CI PMS

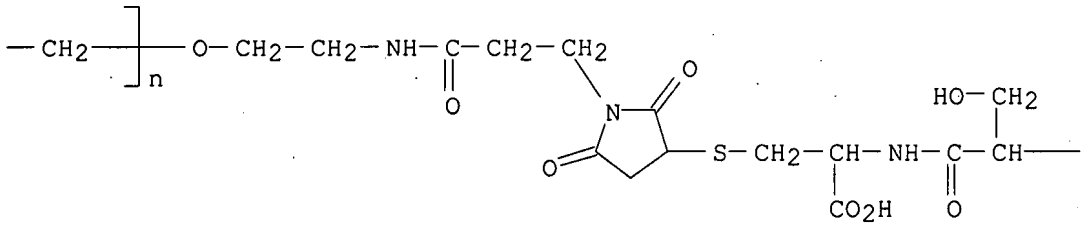
RELATED SEQUENCES AVAILABLE WITH SEQLINK

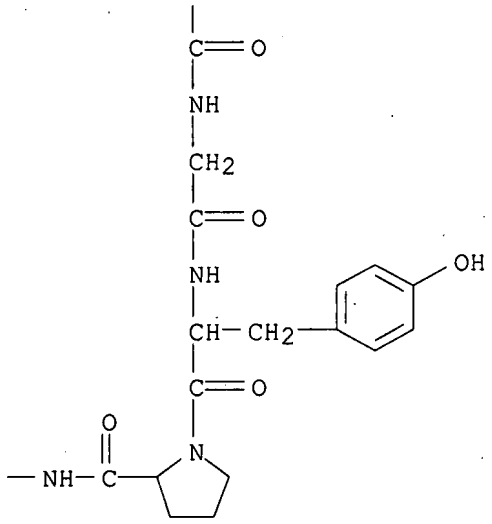
PAGE 1-C



PAGE 2-A







HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):end

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	172.55	175.01

FILE 'CAPLUS' ENTERED AT 10:56:13 ON 21 JUN 2007
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FILE LAST UPDATED: 20 Jun 2007 (20070620/ED)

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=> s l3
L4 1068 L3

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ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF
LOGOFF? (Y)/N/HOLD:n

=> file registry

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	3.29	178.30

FILE 'REGISTRY' ENTERED AT 11:00:34 ON 21 JUN 2007
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=>
Uploading C:\Documents and Settings\jcho2\My Documents\10549630-k.str

L5 STRUCTURE UPLOADED

=> d l5
L5 HAS NO ANSWERS
L5 STR

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

Structure attributes must be viewed using STN Express query preparation.

```
=> s l5 sss full
FULL SEARCH INITIATED 11:01:20 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -      365 TO ITERATE

100.0% PROCESSED      365 ITERATIONS                                  2 ANSWERS
SEARCH TIME: 00.00.01

L6            2 SEA SSS FUL L5

=> d scan

L6   2 ANSWERS   REGISTRY  COPYRIGHT 2007 ACS on STN
IN   Oxirane, methyl-, polymer with oxirane, mono[6-hydroxy-6-oxido-12-oxo-9-
     [(1-oxooctadecyl)oxy]-5,7,11-trioxa-2-aza-6-phosphanonacosanoate], methyl
     ether (9CI)
MF   C42 H82 N O10 P . (C3 H6 O . C2 H4 O)x . C H4 O

     CM   1
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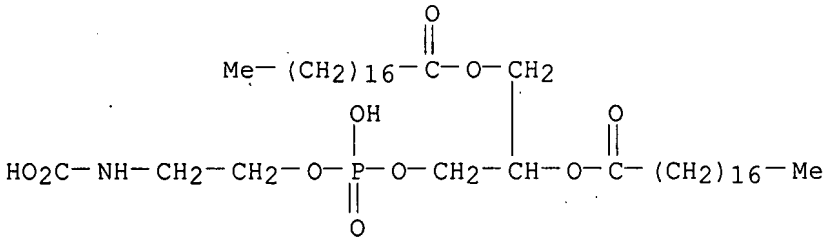

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     CM   2
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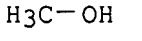

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     CM   3

          CM   4
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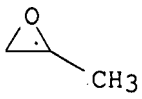
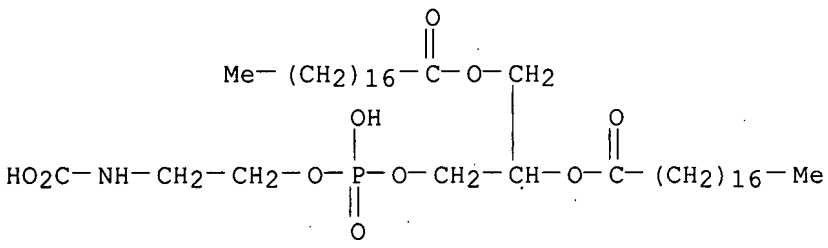


```
          CM   5
```

```
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):2

L6   2 ANSWERS   REGISTRY  COPYRIGHT 2007 ACS on STN
IN   5,7,11-Trioxa-2-aza-6-phosphanonacosanoic acid, 6-hydroxy-12-oxo-9-[(1-
```

oxooctadecyl)oxy]-, 6-oxide (9CI)
MF C42 H82 N O10 P
CI COM



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

=> file caplus
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	172.55	350.85

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=> s l6
L7 1 L6

=> d l7 bib abs hitstr

L7 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2004:799592 CAPLUS
DN 141:320053
TI Phospholipid derivatives for liposome compositions
IN Itoh, Chika; Ohhashi, Syunsuke; Kubo, Kazuhiro; Yasukohchi, Tohru; Kikuchi, Hiroshi; Suzuki, Norio; Kurosawa, Miho; Yamauchi, Hitoshi
PA NOF Corporation, Japan; Daiichi Pharmaceutical Co. Ltd.

SO PCT Int. Appl., 39 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2004083219	A1	20040930	WO 2004-JP3789	20040319
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2007031481	A1	20070208	US 2006-549630	20060817
PRAI JP 2003-77242	A	20030320		
WO 2004-JP3789	W	20040319		

AB A phospholipid derivative represented by the formula R1COCH2CH(OCR2)CH2OP(OX)O2CH2CH2NHCO(CH2)a(CO)bO(A1O)m(A2O)n(A3O)qR3 (R1CO, R2CO = acyl; R3 = H, hydrocarbon; a = 0-4; b = 0-1, provided that when a is 0, then b is 0; X = H, alkali metal, ammonium, organic ammonium; A1O, A2O, and A3O = oxyalkylene, provided that the proportion of oxyethylene in A1O and A3O is 0.5 or higher by weight; and m, n, and q each indicates the average number of moles added, provided that $5 \leq m \leq 600$, $1 \leq n \leq 45$, $0 \leq q \leq 200$, $10 \leq m + n + q \leq 600$, $0.04 \leq n/(m + n + q)$, and $q/(m + n + q) \leq 0.8$). The derivative, on the surface of a liposome, is inhibited from spreading its polyalkylene oxide structure and thus serves to increase the amount of the hydrated layer on the surface and thereby heighten the stability of the liposome. A phospholipid compound monomethyl polyoxypropylene-polyoxyethylenesuccinyl distearoylphosphatidylethanolamine was prepared The phospholipid 1.04 mM was mixed with hydrogenated soybean phosphatidylcholine (HSPC) 11.28 cholesterol 7.68 mM, and doxorubicin solution q.s. to form a liposome with an average particle size of 95 nm.

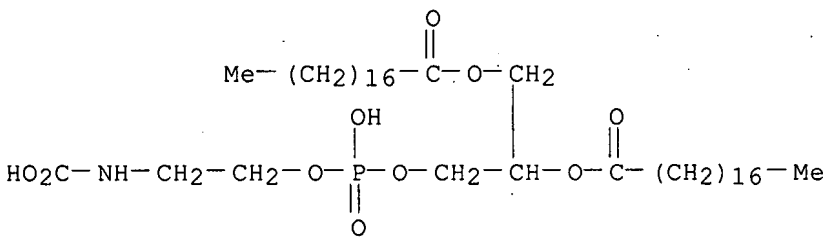
IT 766509-45-9P, Monomethyl polyoxypropylene-polyoxyethylene carbamyldistearoylphosphatidylethanolamine
RL: COS (Cosmetic use); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(phospholipid derivs. for liposome compns.)

RN 766509-45-9 CAPLUS

CN Oxirane, methyl-, polymer with oxirane, mono[6-hydroxy-6-oxido-12-oxo-9-[(1-oxooctadecyl)oxy]-5,7,11-trioxa-2-aza-6-phosphanonacosanoate], methyl ether (9CI) (CA INDEX NAME)

CM 1

CRN 766509-44-8
CMF C42 H82 N O10 P



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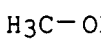
CRN 67-56-1
CMF C H4 O

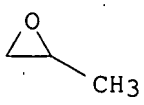


CM 3

CRN 9003-11-6
CMF (C3 H6 O . C2 H4 O)x
CCI PMS

CM 4

CRN 75-56-9
CMF C3 H6 O



CM 5

CRN 75-21-8
CMF C2 H4 O

=> file registry

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	7.62	358.47

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-0.78	-0.78

FILE 'REGISTRY' ENTERED AT 11:04:47 ON 21 JUN 2007

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 20 JUN 2007 HIGHEST RN 938114-25-1
DICTIONARY FILE UPDATES: 20 JUN 2007 HIGHEST RN 938114-25-1

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH December 2, 2006

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=>
Uploading C:\Documents and Settings\jcho2\My Documents\10549630-l.str

L8 STRUCTURE UPLOADED

=> d l8
L8 HAS NO ANSWERS
L8 STR

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

Structure attributes must be viewed using STN Express query preparation.

=> s l8 sss full
FULL SEARCH INITIATED 11:05:32 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 1078 TO ITERATE

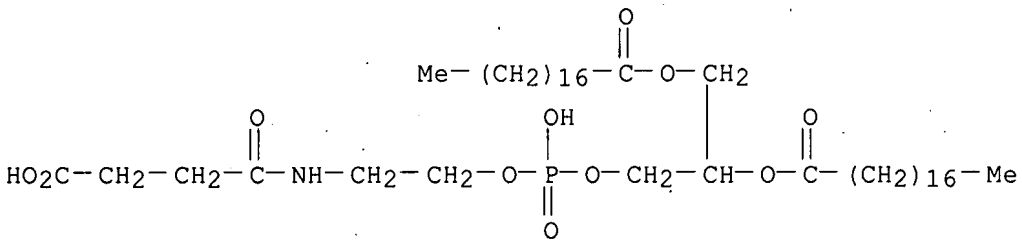
100.0% PROCESSED 1078 ITERATIONS 18 ANSWERS
SEARCH TIME: 00.00.01

L9 18 SEA SSS FUL L8

=> d scan

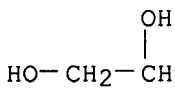
L9 18 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 1,2,3-Propanetriol, homopolymer, mono[9-hydroxy-9-oxido-4,15-dioxo-12-[(1-oxooctadecyl)oxy]-8,10,14-trioxa-5-aza-9-phosphadotriacontanoate] (9CI)
MF C45 H86 N O11 P . (C3 H8 O3)x

CM 1



CM 2

CM 3



HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):end

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	172.55	531.02

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-0.78

FILE 'CAPLUS' ENTERED AT 11:05:46 ON 21 JUN 2007
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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FILE COVERS 1907 - 21 Jun 2007 VOL 146 ISS 26
FILE LAST UPDATED: 20 Jun 2007 (20070620/ED)

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They are available for your review at:

http://www.cas.org/infopolicy.html

=> s l9
L10 30 L9

=> d l10 1-30 bib abs hitstr

L10 ANSWER 1 OF 30 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2007:173633 CAPLUS
DN 146:269771
TI Separation processes
IN Rongved, Pal; Loevhaug, Dagfinn; Fjerdingstad, Hege; Solbakken, Magne; Godal, Aslak; Cuthbertson, Alan
PA Norway
SO U.S. Pat. Appl. Publ., 17pp., Cont.-in-part of U.S. Ser. No. 722,075.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 10

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2007036722	A1	20070215	US 2006-498651	20060803
	CN 1234742	A	19991110	CN 1997-199047	19971028
	HU 9904595	A2	20000428	HU 1999-4595	19971028
	AT 318618	T	20060315	AT 1997-910514	19971028
	ES 2264159	T3	20061216	ES 1997-910514	19971028
	US 6261537	B1	20010717	US 1997-960054	19971029
	EP 1442751	A1	20040804	EP 2004-7226	19980424
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY				

	ES 2224379	T3	20050301	ES 1998-917461	19980424
	KR 2000052829	A	20000825	KR 1999-703658	19990427
	US 2002102215	A1	20020801	US 2001-765614	20010122
	US 2002102217	A1	20020801	US 2001-925715	20010810
	US 6680047	B2	20040120		
	CN 1440816	A	20030910	CN 2002-160420	20021230
	US 2004141922	A1	20040722	US 2003-722075	20031126
	US 2005002865	A1	20050106	US 2003-734730	20031215
PRAI	GB 1996-22366	A	19961028		
	GB 1996-22367	A	19961028		
	GB 1996-22368	A	19961028		
	GB 1997-699	A	19970115		
	GB 1997-8265	A	19970424		
	GB 1997-11842	A	19970606		
	GB 1997-11846	A	19970606		
	US 1997-49264P	P	19970606		
	US 1997-49265P	P	19970606		
	US 1997-49268P	P	19970606		
	US 1997-958993	A2	19971028		
	US 1997-960054	A1	19971029		
	US 2001-765614	B1	20010122		
	US 2003-722075	A2	20031126		
	GB 1996-22369	A	19961028		
	GB 1997-2195	A	19970204		
	GB 1997-11837	A	19970606		
	GB 1997-11839	A	19970606		
	US 1997-49263P	P	19970607		
	US 1997-49266P	P	19970607		
	US 1997-959206	A	19971028		
	EP 1998-917461	A3	19980424		
	US 2001-925715	A1	20010810		

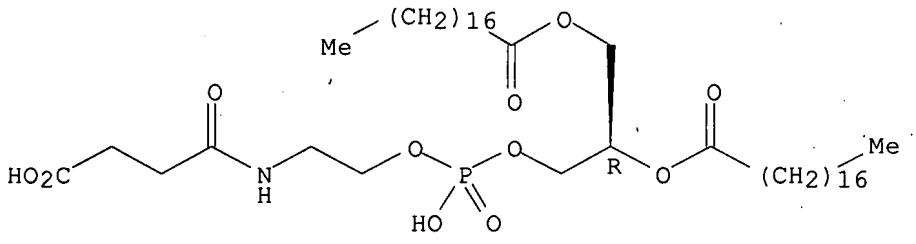
AB Separation of target material from a liquid sample is achieved by coupling the target to targetable encapsulated gas microbubbles, allowing the microbubbles and coupled target to float to the surface of the sample to form a floating microbubble/target layer, and separating this layer from the sample. In a pos. separation process the microbubbles are then removed from the target, e.g. by bursting. In a neg. separation process target-free sample material is recovered following separation of the floating layer. The method may also be used diagnostically to detect the presence of a disease marker in a sample. Novel separation apparatus is also described. Gas microbubbles encapsulated with DSPS and thiolated anti-CD34 antibodies-Mal-PEG2000DSPE, useful for separation of hematopoietic stem cells, were prepared

IT 248253-94-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(in preparation of microbubbles carrying nitrilotriacetic acid chelate binding groups; separation processes and separation apparatus using targetable
encapsulated gas microbubbles)

RN 248253-94-3 CAPLUS

CN 8,10,14-Trioxa-5-aza-9-phosphadotriacontanoic acid, 9-hydroxy-4,15-dioxo-12-[(1-oxooctadecyl)oxy]-, 9-oxide, (12R)- (CA INDEX NAME)

Absolute stereochemistry.



L10 ANSWER 2 OF 30 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2006:1250986 CAPLUS
DN 146:33006
TI Lipid construct for delivery of insulin to a mammal
IN Lau, John R.; Geho, W. Blair
PA SDG, Inc., USA
SO PCT Int. Appl., 148pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 5

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2006127361	A2	20061130	WO 2006-US19119	20060516
	WO 2006127361	A3	20070524		
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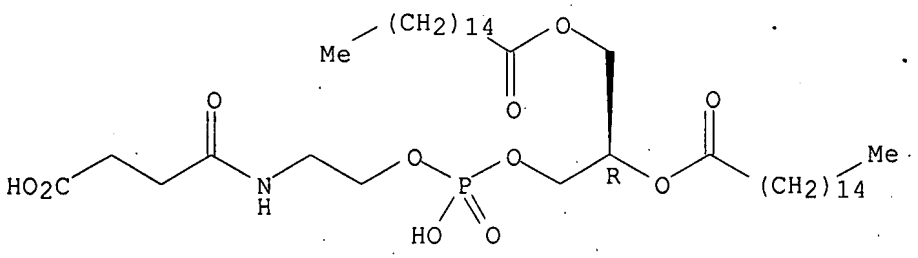
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA				
	US 2006222697	A1	20061005	US 2006-384659	20060320
	US 2006222698	A1	20061005	US 2006-384728	20060320
PRAI	US 2005-683878P	P	20050523		
	US 2006-384659	A	20060320		
	US 2006-384728	A	20060320		
	US 1998-85969P	P	19980519		
	US 1999-313828	A2	19990518		

AB The instant invention is drawn to a hepatocyte targeted composition comprising insulin associated with a lipid construct comprising an amphipathic lipid and an extended amphipathic lipid that targets the construct to a receptor displayed by an hepatocyte. The composition can comprise a mixture of free insulin and insulin associated with the complex. The composition can be modified to protect insulin and the complex from degradation The invention also includes methods for the manufacture of the composition and loading insulin into the composition and recycling various components of the composition Methods of treating individuals inflicted with diabetes are described. Thus, hepatic directed vesicle (HDV) insulin test materials were prepared containing about 191 ng/kg of extended amphipathic lipid (Biotin-X DHPE or Biotin DHPE) and about 14.5 mg/kg of amphipathic lipids (a mixture of 1,2-distearoyl-sn-glycero-3-phosphocholine, cholesterol, and dicetyl phosphate). The test materials obtained had higher levels of hepatic glycogen in diabetic rats than did the regular insulin.

IT 150525-42-1
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(lipid constructs for insulin targeting to hepatocyte receptor and treatment of diabetes)

RN 150525-42-1 CAPLUS
CN 8,10,14-Trioxa-5-aza-9-phosphatriacontanoic acid, 9-hydroxy-4,15-dioxo-12-[(1-oxohexadecyl)oxy]-, 9-oxide, (12R)- (CA INDEX NAME)

Absolute stereochemistry.



L10 ANSWER 3 OF 30 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2006:1250980 CAPLUS
DN 146:50261
TI Lipid construct for delivery of interferon to a mammal
IN Lau, John R.; Geho, W. Blair
PA SDG, Inc., USA
SO PCT Int. Appl., 102pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 5

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2006127360	A2	20061130	WO 2006-US19118	20060516
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	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
PRAI	US 2005-683878P	P	20050523		
	US 2006-384575	A	20060320		

AB The instant invention is drawn to a hepatocyte targeted composition comprising interferon associated with a lipid construct comprising amphipathic lipid mols. and receptor binding mol. The composition can comprise a mixture of free interferon and interferon associated with the complex. The composition can be modified to protect interferon and the complex from degradation The invention also includes methods for the manufacture of the composition and loading interferon into the composition and recycling various components of the composition and methods of treating individuals infected with the hepatitis C and other hepatitis viruses. For example, a lipid construct containing interferon α was prepared from a mixture of the amphipathic lipids and an extended amphipathic lipid, i.e., 2-distearoyl-sn-glycero-3-phosphocholine, cholesterol, dicetyl phosphate, 1,2-dipalmitoyl-sn-glycero-3-phosphoethanolamine-N-(Cap Biotinyl), 1,2-distearoyl-sn-glycero-3-phosphoethanolamine, 1,2-dipalmitoyl-sn-glycero-3-phosphoethanolamine-N-(succinyl) and 1,2-dipalmitoyl-sn-glycero-3-[phospho-rac-(1-glycerol)] (sodium salt). The efficacy of the lipid construct, i.e., a hepatic directed vehicle (HDV) interferon α (100 μg HDV + 10 μg interferon α) was evaluated in a mouse model. The interferon-stimulated response of the induction of the double stranded RNA dependent protein kinase (PKR) gene was used as a marker of interferon hepatic tissue delivery. Interferon alone provided approx. a 5-fold increase in PKR activation relative to a baseline. HDV-interferon α provided approx. a 15-fold increase in

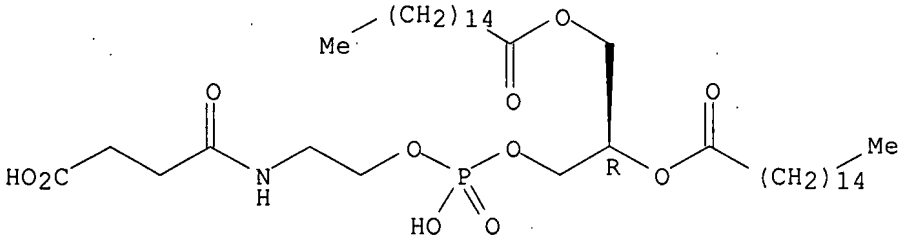
PKR activation relative to a baseline and approx. a 3-fold increase relative to interferon alone. Thus, interferon activity in the hepatic tissue was enhanced by delivering the interferon with HDV.

IT 150525-42-1
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(lipid constructs for interferon targeting to hepatocyte receptors and treatment of hepatitis)

RN 150525-42-1 CAPLUS

CN 8,10,14-Trioxa-5-aza-9-phosphatriacontanoic acid, 9-hydroxy-4,15-dioxo-12-[(1-oxohexadecyl)oxy]-, 9-oxide, (12R)- (CA INDEX NAME)

Absolute stereochemistry.



L10 ANSWER 4 OF 30 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2006:681369 CAPLUS

DN 145:146029

TI Preparation of peptide-containing compounds for targeting cells expressing NP-1 receptor

IN Von Wronski, Mathew A.; Marinelli, Edmund R.; Nunn, Adrian D.; Pillai, Radhakrishna; Ramalingam, Kondareddiar; Tweedle, Michael F.; Linder, Karen E.; Nanjappan, Palaniappa; Raju, Natarajan

PA Bracco International B.V., Neth.

SO U.S. Pat. Appl. Publ., 98 pp., Cont.-in-part of Ser. No. US 2001-871974, CODEN: USXXCO

DT Patent

LA English

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2006153775	A1	20060713	US 2006-342050	20060127
	US 2002147136	A1	20021010	US 2001-871974	20010604
	US 7109167	B2	20060919		
PRAI	US 2000-585364	B2	20000602		
	US 2001-871974	A2	20010604		

OS MARPAT 145:146029

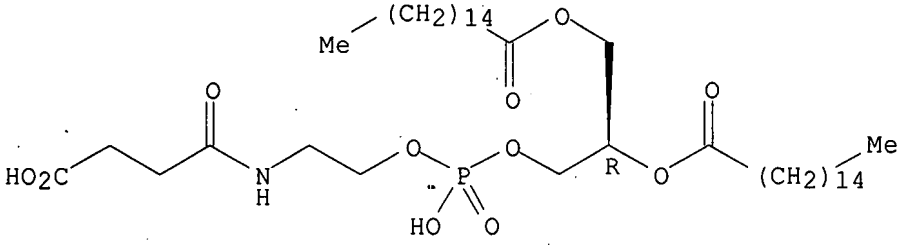
AB The invention provides compds. for targeting endothelial cells, tumor cells or other cells that express the neuropilin-1 (NP-1) receptor, compns. containing the same and methods for their use. The compds. are of the formula A-L-B (A = a monomer, multimer or polymer of TKPPR or analog which specifically binds to NP-1 or cells expressing NP-1 with avidity equal or greater than TKPPR; L = a lipid or a non-lipid (e.g., polymer) linker; B = a substrate). Addnl., the present invention includes diagnostic, therapeutic and radio-therapeutic compns. useful for visualization, therapy or radiotherapy. For example, DPPE-glutaroyl-Gly-Thr-Lys-Pro-Pro-Arg-OH (DPPE-Glu-GTKPPR) was prepared and formulated into gas-filled microbubble compns. for ultrasonic echog. The bubbles bind to human aortic endothelial cells (HAEC) under flow. The number of bubbles bound may increase with time for several minutes at a given flow rate, up to a flow rate producing 1.53 dynes/cm2, while bubbles without the targeting moiety (DPPE-Glu-GTKPPR) may not bind. However, once bound under a lesser flow rate (e.g., 1.53 dynes/cm2), the shear stress on bubbles containing DPPE-Glu-GTKPPR may be increased to 6.1 dynes/cm2 without dislodging many

of the bound bubbles.

IT 150525-42-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of peptide-containing compds. and compns. for targeting cells expressing neuropilin-1 receptor for diagnosis, imaging, and therapy)

RN 150525-42-1 CAPLUS
CN 8,10,14-Trioxa-5-aza-9-phosphatriacontanoic acid, 9-hydroxy-4,15-dioxo-12-[(1-oxohexadecyl)oxy]-, 9-oxide, (12R)- (CA INDEX NAME)

Absolute stereochemistry.



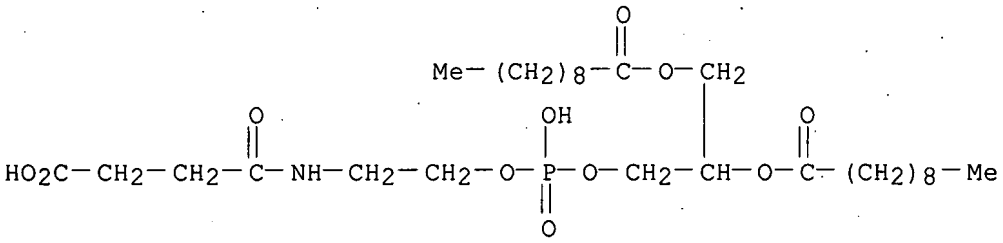
L10 ANSWER 5 OF 30 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2005:492463 CAPLUS
DN 143:13409
TI Phospholipid membranes having allergen or antibodies on the surface
IN Uchida, Tetsuya; Mori, Masato
PA NOF Corporation, Japan; National Institute Infectious Diseases
SO Jpn. Kokai Tokkyo Koho, 28 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2005145959	A	20050609	JP 2004-305217	20041020
	US 2005266066	A1	20051201	US 2004-969543	20041020
PRAI	JP 2003-360047	A	20031020		

AB The invention relates to a phospholipid membrane consisting of C10-12 acyl or hydrocarbon group-containing phospholipids and a phospholipid membrane stabilizer, wherein the phospholipid has antibody or allergen on the surface. The antibody or allergen-bound phospholipid membrane is suitable for use in a liposome for hyposensitization therapy. Liposome was prepared from didodecanoylphosphatidylcholine, didodecanoylphosphatidylethanolamine, cholesterol, and didodecanoylphosphatidylserine sodium salt, and treated with ovalbumin to obtain ovalbumin-immobilized liposome. The obtained ovalbumin-immobilized liposome induced IgG in a mouse at a ratio IgE/IgG ≤ 0.001.

IT 852462-67-0P
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(phospholipid membranes having allergen or antibodies on the surface suitable for use in liposomes)

RN 852462-67-0 CAPLUS
CN 8,10,14-Trioxa-5-aza-9-phosphatetracosanoic acid, 9-hydroxy-4,15-dioxo-12-[(1-oxodecyl)oxy]-, 9-oxide (9CI) (CA INDEX NAME)



L10 ANSWER 6 OF 30 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2005:453648 CAPLUS
DN 143:13245
TI Remote detection of substance delivery to cells
IN Drummond, Daryl C.; Hong, Keelung; Kirpotin, Dmitri B.
PA USA
SO U.S. Pat. Appl. Publ., 31 pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2005112065	A1	20050526	US 2004-888794	20040709
	AU 2004264857	A1	20050224	AU 2004-264857	20040709
	WO 2005016141	A1	20050224	WO 2004-US22133	20040709

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RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

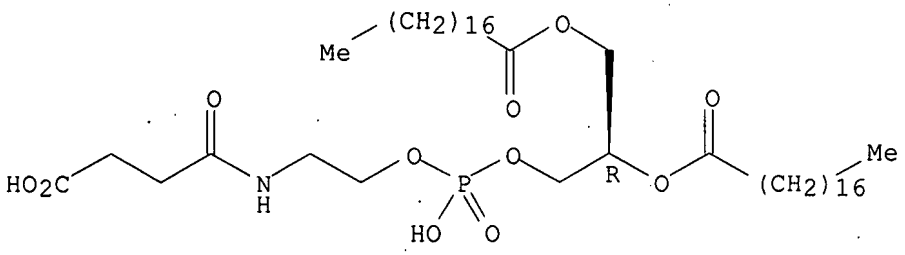
PRAI US 2003-486080P P 20030709
WO 2004-US22133 W 20040709

AB The present invention provides for the development of endocytosis-sensitive probes, and a remote method for measuring cellular endocytosis. These probes are based on the reduced water permeability of a nanoparticle or liposomal delivery system, and inherent degradability or disruption of barrier integrity upon endocytosis. The invention also provides for liposomes having combined therapeutic and diagnostic utilities by co-encapsulating ionically coupled diagnostic and therapeutic agents, in one embodiment, by a method using anionic chelators to prepare electrochem. gradients for loading of amphipathic therapeutic bases into liposomes already encapsulating an imaging agent. The invention provides for imaging of therapeutic liposomes by inserting a lipopolymer anchored, remotely sensing reporter mols. into liposomal lipid layer. The invention allows for an integrated delivery system capable of imaging mol. fingerprints in diseased tissues, treatment, and treatment monitoring.

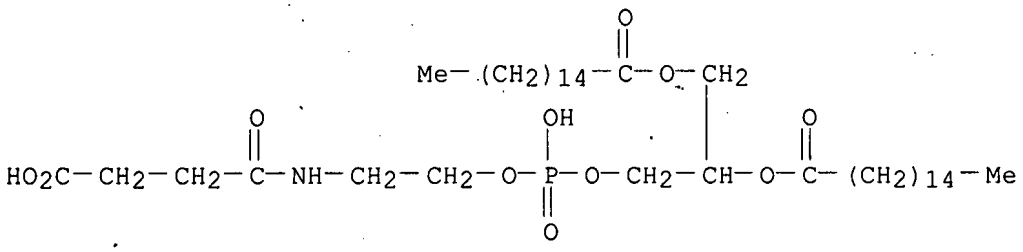
IT 248253-94-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(liposomal delivery systems as diagnostic and therapeutic agents)

RN 248253-94-3 CAPLUS
CN 8,10,14-Trioxa-5-aza-9-phosphadotriacontanoic acid, 9-hydroxy-4,15-dioxo-12-[(1-oxooctadecyl)oxy]-, 9-oxide, (12R)- (CA INDEX NAME)

Absolute stereochemistry.



L10 ANSWER 7 OF 30 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2004:861949 CAPLUS
DN 142:303393
TI Enhancement of the Efficacy of An Antagonist of an Extracellular Receptor by Attachment to the Surface of a Biocompatible Carrier
AU Wartchow, Charles A.; Alters, Susan E.; Garzone, Pamela D.; Li, Lingyun; Choi, Steven; DeChene, Neal E.; Doede, Tina; Huang, Linong; Pease, John S.; Shen, Zhimin; Knox, Susan J.; Cleland, Jeffrey L.
CS Targesome Inc., Palo Alto, CA, 94303, USA
SO Pharmaceutical Research (2004), 21(10), 1880-1885
CODEN: PHREEB; ISSN: 0724-8741
PB Springer Science+Business Media, Inc.
DT Journal
LA English
AB In order to improve the in vitro and in vivo efficacy of an integrin antagonist (IA) of the extracellular domain of the αvβ3 integrin, a receptor upregulated on tumor neovasculature, the IA was attached to the surface of a dextran-coated liposome (DCL). IA-DCLs were characterized in vitro, and the pharmacokinetic and anti-tumor properties were assessed in vivo. The in vitro binding properties were measured with purified integrin, endothelial cells, and melanoma cells. The pharmacokinetic parameters were measured in healthy mice with 14C-labeled IA-DCLs and anti-tumor efficacy was assessed with the M21 human melanoma xenograft mouse model. In vitro, IC50 values for IA-DCLs and IA are similar, and IA-DCLs inhibit cell proliferation relative to controls. IA-DCLs are stable in serum, and the pharmacokinetic half-life in mice is 23 h. In the M21/mouse model, statistically significant inhibition of tumor growth was observed for mice treated with IA-DCLs, whereas controls including saline, DCLs lacking IA, and cyclo(RGDfV) were ineffective. Increased apoptosis and a reduction in vessel counts relative to controls were present in tumors from animals treated with IA-DCLs. These results demonstrate that IA-DCLs are potent anti-angiogenic therapeutic agents with superior in vivo activity and pharmacol. compared to unmodified IA.
IT 88848-80-0
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(enhancement of efficacy of an antagonist of an extracellular receptor by attachment to the surface of a biocompatible carrier)
RN 88848-80-0 CAPLUS
CN 8,10,14-Trioxa-5-aza-9-phosphatriacontanoic acid, 9-hydroxy-4,15-dioxo-12-[(1-oxohexadecyl)oxy]-, 9-oxide (9CI) (CA INDEX NAME)



RE.CNT 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 8 OF 30 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2004:799592 CAPLUS
DN 141:320053
TI Phospholipid derivatives for liposome compositions
IN Itoh, Chika; Ohhashi, Syunsuke; Kubo, Kazuhiro; Yasukohchi, Tohru; Kikuchi, Hiroshi; Suzuki, Norio; Kurosawa, Miho; Yamauchi, Hitoshi
PA NOF Corporation, Japan; Daiichi Pharmaceutical Co. Ltd.
SO PCT Int. Appl., 39 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004083219	A1	20040930	WO 2004-JP3789	20040319
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	US 2007031481	A1	20070208	US 2006-549630	20060817
PRAI	JP 2003-77242	A	20030320		
	WO 2004-JP3789	W	20040319		

AB A phospholipid derivative represented by the formula R1COCH2CH(OCR2)CH2OP(OX)O2CH2CH2NHCO(CH2)a(CO)bO(A1O)m(A2O)n(A3O)qR3 (R1CO, R2CO = acyl; R3 = H, hydrocarbon; a = 0-4; b = 0-1, provided that when a is 0, then b is 0; X = H, alkali metal, ammonium, organic ammonium; A1O, A2O, and A3O = oxyalkylene, provided that the proportion of oxyethylene in A1O and A3O is 0.5 or higher by weight; and m, n, and q each indicates the average number of moles added, provided that $5 \leq m \leq 600$, $1 \leq n \leq 45$, $0 \leq q \leq 200$, $10 \leq m + n + q \leq 600$, $0.04 \leq n/(m + n + q)$, and $q/(m + n + q) \leq 0.8$). The derivative, on the surface of a liposome, is inhibited from spreading its polyalkylene oxide structure and thus serves to increase the amount of the hydrated layer on the surface and thereby heighten the stability of the liposome. A phospholipid compound monomethyl polyoxypropylene-polyoxyethylenesuccinyl distearoylphosphatidylethanolamine was prepared The phospholipid 1.04 mM was mixed with hydrogenated soybean phosphatidylcholine (HSPC) 11.28 cholesterol 7.68 mM, and doxorubicin solution q.s. to form a liposome with an average particle size of 95 nm.

IT 766509-39-1P, Monomethyl polyoxypropylene-polyoxyethylene succinyldistearoylphosphatidylethanolamine
RL: COS (Cosmetic use); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

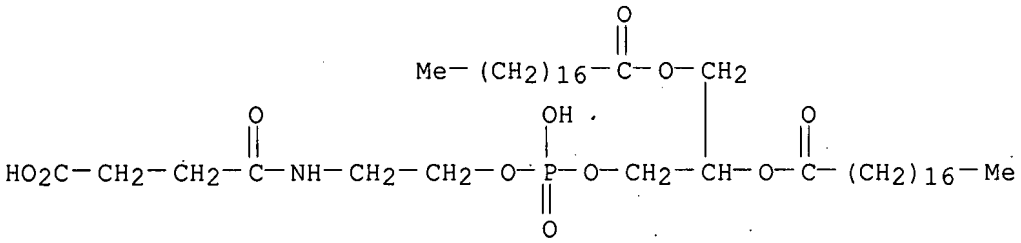
(phospholipid derivs. for liposome compns.)

RN 766509-39-1 CAPLUS

CN Oxirane, methyl-, polymer with oxirane, mono[9-hydroxy-9-oxido-4,15-dioxo-12-[(1-oxooctadecyl)oxy]-8,10,14-trioxa-5-aza-9-phosphadotriacontanoate], methyl ether (9CI) (CA INDEX NAME)

CM 1

CRN 161693-70-5
CMF C45 H86 N O11 P



CM 2

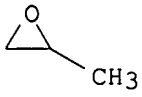
CRN 67-56-1
CMF C H4 O

CM 3

CRN 9003-11-6
CMF (C3 H6 O . C2 H4 O)x
CCI PMS

CM 4

CRN 75-56-9
CMF C3 H6 O



CM 5

CRN 75-21-8
CMF C2 H4 O

L10 ANSWER 9 OF 30 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2004:681677 CAPLUS
DN 141:212755
TI Liposomes containing an integrin antagonist as targeting molecule
IN Alters, Susan E.; Cleland, Jeffrey Lynn; Garzone, Pamela C.; Pease, John S.; Wartchow, Charles Aaron
PA Targesome Inc., USA
SO PCT Int. Appl., 82 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004070009	A2	20040819	WO 2004-US2816	20040202
	WO 2004070009	A3	20050407		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI

RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

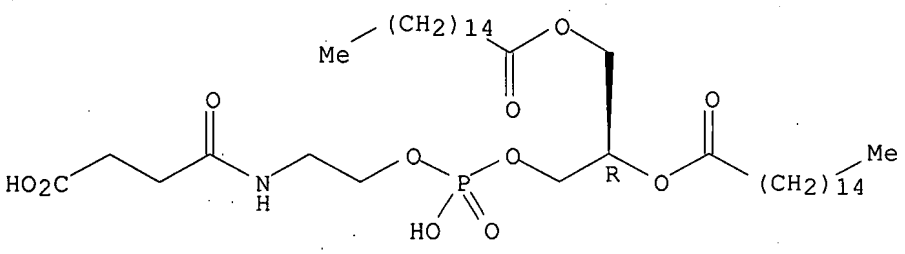
PRAI	US 2003-443954P	P	20030131
	US 2003-458709P	P	20030328
	US 2003-463581P	P	20030416

AB Targeted macromols. comprising a stabilizing agent-coated liposome and more than one targeting entity, i.e., an integrin antagonist, are provided, as well as methods for their preparation and use. The stabilizing agent is selected from polymers, biopolymers, proteins, etc., e.g., dextran or modified dextran. For example, antitumor efficacy of liposomes containing an αVβ3-integrin antagonist 4-[2-(3,4,5,6-tetrahydropyrimidin-2-ylamino)ethyloxy]benzoyl-2-(S)-aminoethylsulfonylamino-β-alanine (IA, preparation given) as targeting moiety and coated with amine-modified dextran was evaluated in vivo in the U251 orthotopic glioma model in nude mice. Treatment with IA-containing dextran-coated liposomes (IA-DCL) significantly reduced tumor growth when compared to treatment with saline alone. The percentage of human tumor cells, as assessed by staining with an antibody to HLA class I, was reduced from 6.8% in control mice down to 3% following IA-DCL treatment, a reduction of approx. 50%. The IA-DCL binds to αVβ3-integrin, located on the surface of endothelial cells, blocking cell adhesion and migration and also causing apoptosis.

IT 150525-42-1
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(stabilizing agent-coated liposomes containing integrin antagonist as targeting moiety)

RN 150525-42-1 CAPLUS
CN 8,10,14-Trioxa-5-aza-9-phosphatriacontanoic acid, 9-hydroxy-4,15-dioxo-12-[(1-oxohexadecyl)oxy]-, 9-oxide, (12R)- (CA INDEX NAME)

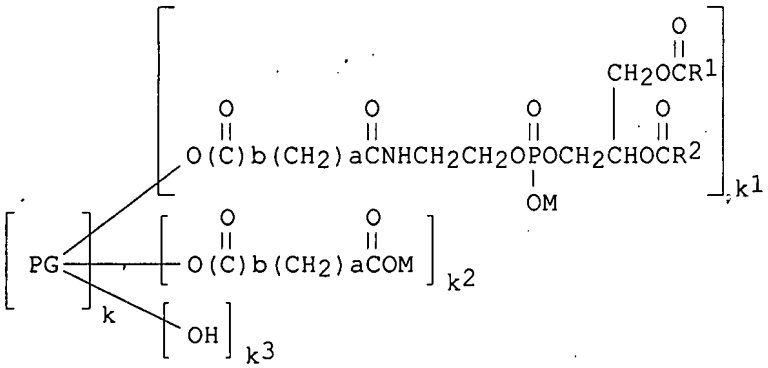
Absolute stereochemistry.



L10 ANSWER 10 OF 30 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2004:589555 CAPLUS
DN 141:142211
TI Phospholipid derivatives used for surfactants, solubilizers, dispersants in cosmetics and lipid membranes and their preparation
IN Kubo, Kazuhiro; Itoh, Chika; Ohhashi, Syunsuke; Yasukohchi, Tohru; Ohkawa, Yusuke; Kikuchi, Hiroshi; Suzuki, Norio; Kurosawa, Miho; Yamauchi, Hitoshi
PA NOF Corporation, Japan; Daiichi Pharmaceutical Co., Ltd.
SO PCT Int. Appl., 52 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2004060899	A1	20040722	WO 2003-JP15969	20031212
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2513144	A1	20040722	CA 2003-2513144	20031212
AU 2003289070	A1	20040729	AU 2003-289070	20031212
EP 1591447	A1	20051102	EP 2003-778894	20031212
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
CN 1735624	A	20060215	CN 2003-80108368	20031212
US 2006210618	A1	20060921	US 2005-541309	20050705
PRAI JP 2003-330	A	20030106		
WO 2003-JP15969	W	20031212		

GI



I

AB The phospholipid derivs. I ([PG]k = residue of a polyglycerol having d.p. k; k = 2-50; R1CO, R2CO = C8-22 acyl; a = 0-5; b = 0-1; M = H, alkali metal, ammonium or organic ammonium; and k1, k2, k3 = nos. satisfying the relationships: $1 \leq k1 \leq (k + 2)/2$, $0 \leq k2$, and $k1 + k2 + k3 = k + 2$). The derivs. are highly safe for the living body and can be favorably utilized in drug delivery systems such as liposome.

IT 725724-27-6P 725724-29-8P 725724-33-4P

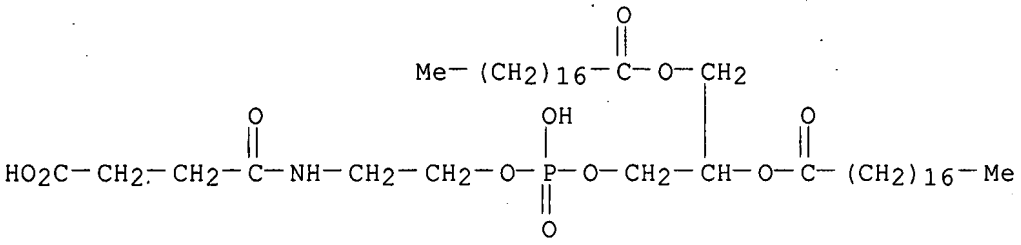
RL: BUU (Biological use, unclassified); COS (Cosmetic use); IMF (Industrial manufacture); TEM (Technical or engineered material use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of phospholipid derivs. used for surfactants, solubilizers, dispersants in cosmetics and lipid membranes)

RN 725724-27-6 CAPLUS

CN 8,10,14-Trioxa-5-aza-9-phosphadotriacontanoic acid, 9-hydroxy-4,15-dioxo-12-[(1-oxooctadecyl)oxy]-, 9-oxide, ester with octaglycerol (9CI) (CA INDEX NAME)

CM 1

CRN 161693-70-5
CMF C45 H86 N O11 P



CM 2

CRN 70103-30-9
CMF C24 H50 O17
CCI IDS, MAN

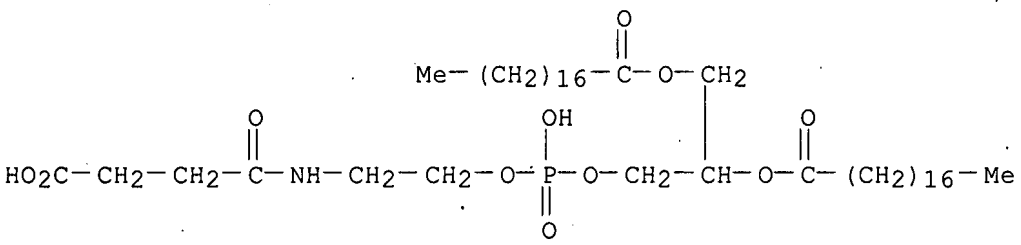
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 725724-29-8 CAPLUS

CN 1,2,3-Propanetriol, homopolymer, mono[9-hydroxy-9-oxido-4,15-dioxo-12-[(1-oxooctadecyl)oxy]-8,10,14-trioxa-5-aza-9-phosphadotriacontanoate] (9CI) (CA INDEX NAME)

CM 1

CRN 161693-70-5
CMF C45 H86 N O11 P

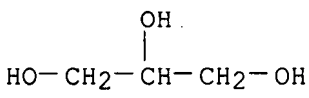


CM 2

CRN 25618-55-7
CMF (C3 H8 O3)x
CCI PMS

CM 3

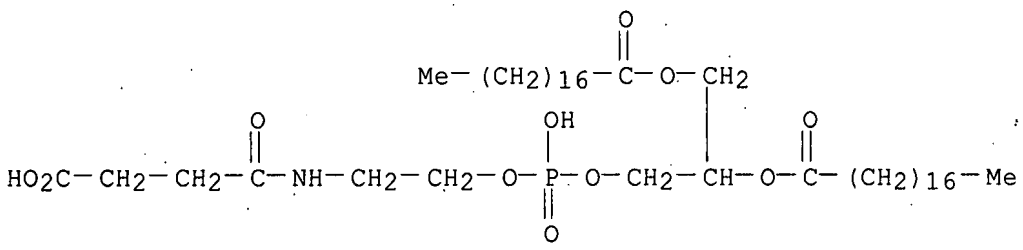
CRN 56-81-5
CMF C3 H8 O3



RN 725724-33-4 CAPLUS
CN 8,10,14-Trioxa-5-aza-9-phosphadotriacontanoic acid, 9-hydroxy-4,15-dioxo-12-[(1-oxooctadecyl)oxy]-, 9-oxide, ester with hexaglycerol (9CI) (CA INDEX NAME)

CM 1

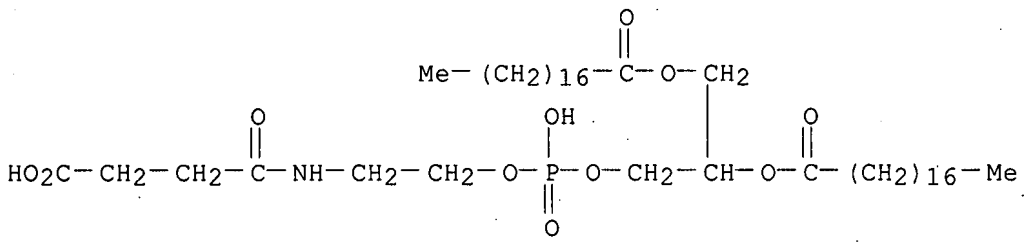
CRN 161693-70-5
CMF C45 H86 N O11 P



CM 2

CRN 36675-34-0
CMF C18 H38 O13
CCI IDS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IT 161693-70-5P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(preparation of phospholipid derivs. used for surfactants, solubilizers, dispersants in cosmetics and lipid membranes)
RN 161693-70-5 CAPLUS
CN 8,10,14-Trioxa-5-aza-9-phosphadotriacontanoic acid, 9-hydroxy-4,15-dioxo-12-[(1-oxooctadecyl)oxy]-, 9-oxide (9CI) (CA INDEX NAME)



L10 ANSWER 11 OF 30 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2003:796716 CAPLUS
DN 139:296564
TI Phospholipid derivatives for cosmetic and pharmaceutical uses
IN Itoh, Chika; Kubo, Kazuhiro; Ohhashi, Syunsuke; Yasukohchi, Tohru; Kikuchi, Hiroshi; Suzuki, Norio; Kurosawa, Miho; Yamauchi, Hitoshi
PA NOF Corporation, Japan; Daiichi Pharmaceutical Co., Ltd.
SO PCT Int. Appl., 47 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003082882	A1	20031009	WO 2003-JP3966	20030328
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2003220917	A1	20031013	AU 2003-220917	20030328
	EP 1498420	A1	20050119	EP 2003-715589	20030328
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	US 2005220856	A1	20051006	US 2005-508704	20050525
PRAI	JP 2002-93694	A	20020329		
	WO 2003-JP3966	W	20030328		

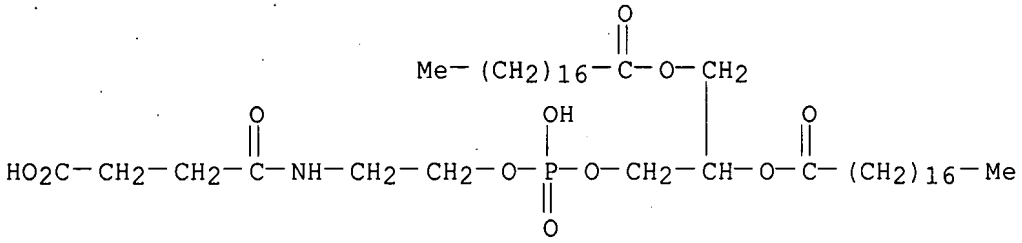
AB Disclosed is a phospholipid derivative which is highly safe for the living body and is suitable for use in solubilizing or dispersing a physiol. active substance, etc. or in the field of drug delivery systems, e.g., a liposome, or cosmetics. The phospholipids comprise polyalkylene oxide groups. For example, polyoxyethylene pentaerythritol ether glutaryl-mono(distearoylphosphatidylethanolamine succinate) was prepared and used as a solubilizer in formulating lotions.

IT 609816-64-0P, Polyoxyethylene hexaglycerol ether-mono(distearoylphosphatidylethanolamine succinate) 609816-65-1P, Polyoxyethylene hexaglycerol ether glutaryl-mono(distearoylphosphatidyleth anolamine succinate) 609844-38-4P
RL: COS (Cosmetic use); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of phospholipid derivs. for cosmetic and pharmaceutical uses)

RN 609816-64-0 CAPLUS
CN Poly(oxy-1,2-ethanediyl), α-hydro-ω-hydroxy-, ether with hexaglycerol, 9-hydroxy-9-oxido-4,15-dioxo-12-[(1-oxooctadecyl)oxy]-8,10,14-trioxa-5-aza-9-phosphadotriacontanoate (9CI) (CA INDEX NAME)

CM 1

CRN 161693-70-5
CMF C45 H86 N O11 P



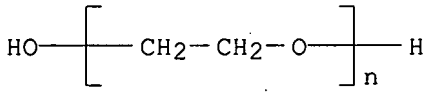
CM 2

CRN 36675-34-0
CMF C18 H38 O13
CCI IDS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

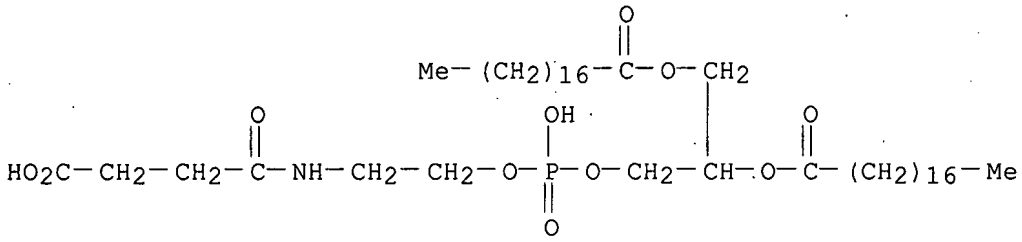
CRN 25322-68-3
CMF (C2 H4 O)n H2 O
CCI PMS



RN 609816-65-1 CAPLUS
CN Poly(oxy-1,2-ethanediyl), α-hydro-ω-hydroxy-, ether with hexaglycerol, 9-hydroxy-9-oxido-4,15-dioxo-12-[(1-oxooctadecyl)oxy]-8,10,14-trioxa-5-aza-9-phosphadotriacontanoate pentanedioate (9CI) (CA INDEX NAME)

CM 1

CRN 161693-70-5
CMF C45 H86 N O11 P



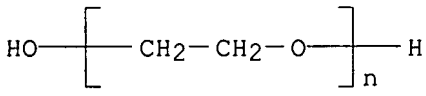
CM 2

CRN 36675-34-0
CMF C18 H38 O13
CCI IDS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

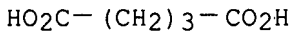
CM 3

CRN 25322-68-3
CMF (C2 H4 O)n H2 O
CCI PMS



CM 4

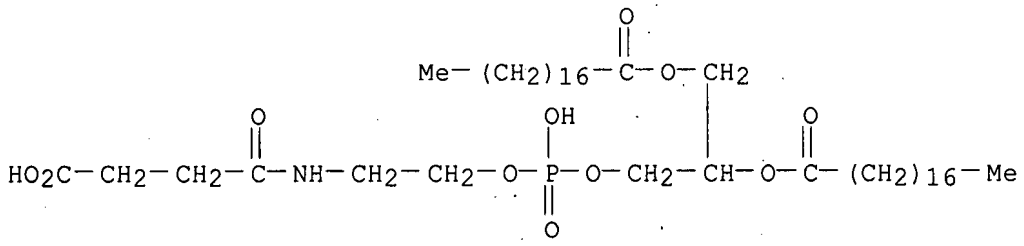
CRN 110-94-1
CMF C5 H8 O4



RN 609844-38-4 CAPLUS
CN Poly(oxy-1,2-ethanediyl), α,α',α''-1,2,3-propanetriyltris[ω-hydroxy-, mono(9-hydroxy-9-oxido-4,15-dioxo-12-[(1-oxooctadecyl)oxy]-8,10,14-trioxa-5-aza-9-phosphadotriacontanoate) (9CI) (CA INDEX NAME)

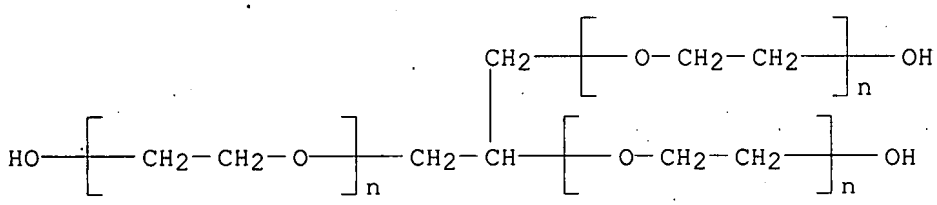
CM 1

CRN 161693-70-5
CMF C45 H86 N O11 P



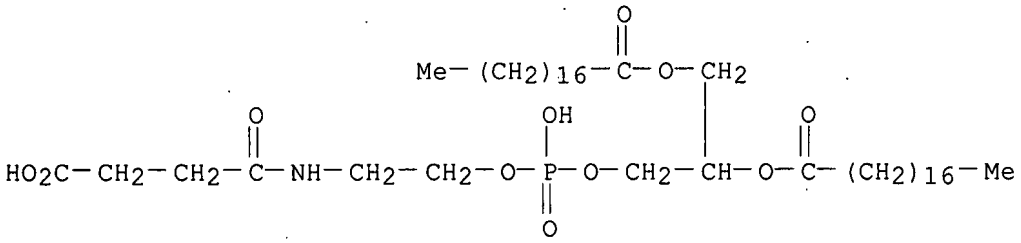
CM 2

CRN 31694-55-0
CMF (C2 H4 O)n (C2 H4 O)n (C2 H4 O)n C3 H8 O3
CCI PMS



IT 161693-70-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)
(preparation of phospholipid derivs. for cosmetic and pharmaceutical uses)
RN 161693-70-5 CAPLUS
CN 8,10,14-Trioxa-5-aza-9-phosphadotriacontanoic acid, 9-hydroxy-4,15-dioxo-12-[(1-oxooctadecyl)oxy]-, 9-oxide (9CI) (CA INDEX NAME)



RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 12 OF 30 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2003:532140 CAPLUS
DN 139:106450
TI Targeted multivalent macromolecules
IN Wartchow, Charles Aaron; Dechene, Neal Edward; Pease, John S.; Shen, Zhimin; Trulson, Julie; Bednarski, Mark David; Danthi, S. Narasimhan; Zhang, Michael; Choi, Hoyul Steven
PA Targesome, Inc., USA
SO U.S. Pat. Appl. Publ., 71 pp., Cont.-in-part of U.S. Ser. No. 976,254.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 9

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003129223	A1	20030710	US 2002-158777	20020530
	US 2002071843	A1	20020613	US 2001-976254	20011011
	ZA 2003009924	A	20050622	ZA 2003-9924	20031222
	US 2006188560	A1	20060824	US 2006-396743	20060403
PRAI	US 2000-239684P	P	20001011		
	US 2001-294309P	P	20010530		
	US 2001-309104P	P	20010731		
	US 2001-312435P	P	20010815		
	US 2001-976254	A2	20011011		
	US 2001-345891P	P	20011029		
	US 2002-158761	A3	20020530		

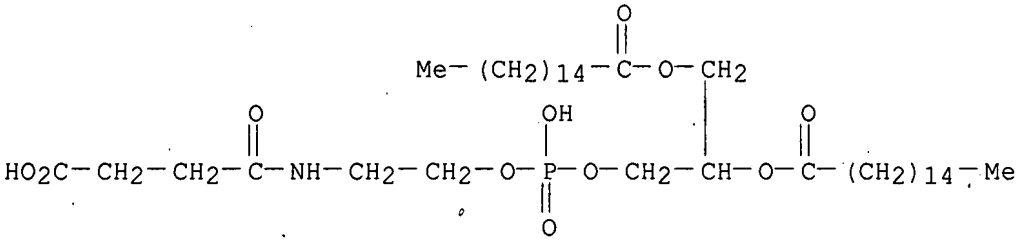
AB Targeted therapeutic agents, comprising a linking carrier, a therapeutic entity associated with the linking carrier, and at least one targeting entity are provided, as well as methods for their preparation and use. A targeted therapeutic agent is selected from matrix metalloprotease inhibitors, analgesics, aggrecanase inhibitors, alkylating agents, topoisomerase inhibitors, estrogens, androgens, interferons, intercalating agents, kinase modulators, etc. The linking carrier comprises a phosphatidylcholine and is selected from liposomes and a polymerized vesicle. A targeting entity targets a lipid construct to a target selected from a cell surface target, an intracellular target, and an extracellular matrix component. The targeting entity has, e.g., a vascular or tumor cell target selected from chemokine receptors, matrix metalloproteases, integrins, or prostate-specific membrane antigens. For example, integrin-targeted 90Y-labeled peptidomimetic vesicle complexes (IA-NP-Y90) at 5 μCi/g reduced tumor growth in a melanoma mouse model with average normalized tumor volume less than half the volume in the buffer-treated animals. In addition, the average tumor volume quadrupling time (TVQT) for tumor

treated with IA-NP-Y90 was 15.0 days compared to 6.4 days for tumors treated with buffer.

IT 88848-80-0
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (preparation of targeted multivalent macromols. for therapy, imaging and diagnosis of cancer)

RN 88848-80-0 CAPLUS

CN 8,10,14-Trioxa-5-aza-9-phosphatriacontanoic acid, 9-hydroxy-4,15-dioxo-12-[(1-oxohexadecyl)oxy]-, 9-oxide (9CI) (CA INDEX NAME)



L10 ANSWER 13 OF 30 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2002:778699 CAPLUS

DN 137:299916

TI Peptide-containing compounds for targeting cells expressing NP-1 receptor

IN Von Wronski, Mathew A.; Marinelli, Edmund R.; Nunn, Adrian D.; Pillai, Radhakrishna; Ramalingam, Kondareddiar; Tweedle, Michael F.; Linder, Karen; Nanjappan, Palaniappa; Raju, Natarajan

PA USA

SO U.S. Pat. Appl. Publ., 85 pp., Cont.-in-part of U.S. Ser. No. 585,364.
CODEN: USXXCO

DT Patent

LA English

FAN.CNT 3

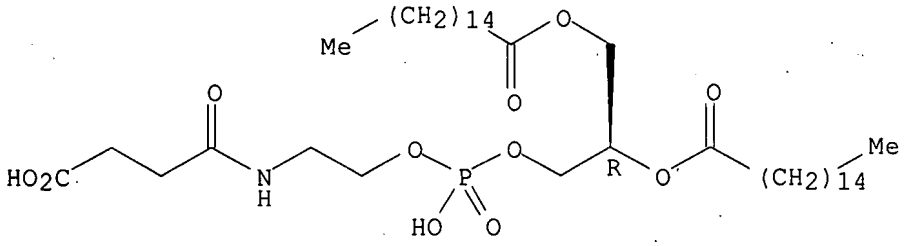
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2002147136	A1	20021010	US 2001-871974	20010604
	US 7109167	B2	20060919		
	US 2006153775	A1	20060713	US 2006-342050	20060127
	US 2006258566	A1	20061116	US 2006-381884	20060505
	US 2006263303	A1	20061123	US 2006-381908	20060505
PRAI	US 2000-585364	A2	20000602		
	US 2001-871974	A2	20010604		

OS MARPAT 137:299916

AB The present invention provides compds. for targeting endothelial cells, tumor cells or other cells that express the neuropilin-1 (NP-1) receptor, compns. containing the same and methods for their use. The compds. are of the formula A-L-B (A = a monomer, multimer or polymer of TKPPR or analog which specifically binds to NP-1 or cells expressing NP-1 with avidity equal or greater than TKPPR; L = a lipid or a non-lipid (e.g., polymer) linker; B = a substrate). Addnl., the present invention includes diagnostic, therapeutic and radiotherapeutic compns. useful for visualization, therapy or radiotherapy. For example, DPPE-glutaroyl-Gly-Thr-Lys-Pro-Pro-Arg-OH (DPPE-Glu-GTKPPR) was prepared and formulated into gas-filled microbubble compns. for ultrasonic echog. The bubbles bind to human aortic endothelial cells (HAEC) under flow. The number of bubbles bound may increase with time for several minutes at a given flow rate, up to a flow rate producing 1.53 dynes/cm2, while bubbles without the targeting moiety (DPPE-Glu-GTKPPR) may not bind. However, once bound under a lesser flow rate (e.g., 1.53 dynes/cm2), the shear stress on bubbles containing DPPE-Glu-GTKPPR may be increased to 6.1 dynes/cm2 without dislodging many of the bound bubbles.

IT 150525-42-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of peptide-containing compds. and compns. for targeting cells expressing neuropilin-1 receptor for diagnosis, imaging, and therapy)
RN 150525-42-1 CAPLUS
CN 8,10,14-Trioxa-5-aza-9-phosphatriacontanoic acid, 9-hydroxy-4,15-dioxo-12-[(1-oxohexadecyl)oxy]-, 9-oxide, (12R)- (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 14 OF 30 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2002:353313 CAPLUS
DN 136:355484
TI Novel targeted compositions for diagnostic and therapeutic use
IN Unger, Evan C.; Matsunaga, Terry O.; Schumann, Patricia A.
PA ImaRx Therapeutics, Inc., USA
SO PCT Int. Appl., 206 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 10

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002036161	A2	20020510	WO 2001-US32308	20011017
	WO 2002036161	A3	20030925		
	W: AU, CA, JP				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
	CA 2428606	A1	20020510	CA 2001-2428606	20011017
	AU 200213285	A	20020515	AU 2002-13285	20011017
	EP 1365805	A2	20031203	EP 2001-981655	20011017
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
	JP 2005500245	T	20050106	JP 2002-538970	20011017
PRAI	US 2000-699679	A	20001030		
	WO 2001-US32308	W	20011017		

OS MARPAT 136:355484
AB Novel targeted compns. which may be used for diagnostic and therapeutic use may comprise lipid, protein or polymer gas-filled vesicles which further comprise novel compds. of formula L-P-T, where L is a hydrophobic compound, P is a hydrophilic polymer, and T is a targeting ligand which targets tissues, cells or receptors, including myocardial cells, endothelial cells, epithelial cells, tumor cells and the glycoprotein GPIIbIIIa receptor. Compds. R1R2N-R3-CH(NR4R5)-R6-X1-P-R7-X2-T [X1, X2 is a direct bond or a linking atom or group; R1, R4 = C7-23 acyl; R2, R5 = H or lower alkyl; R3, R6, R7 = a direct bond or C1-10 alkylene; same P and T] are claimed. The compns. can be used in conjunction with diagnostic imaging, such as ultrasound, as well as therapeutic applications, such as therapeutic ultrasound. Examples include the preparation of

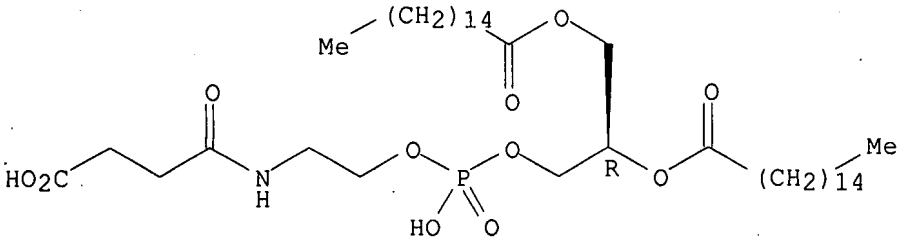
N,N'-bis(hexadecylaminocarbonylmethyl)-N,N'-bis[β-(trimethylammonio)ethylaminocarbonylmethyl]-N,N'-dimethylethylenediamine tetraiodide and N-(1,2-dipalmitoyl-sn-glycero-3-succinyl)-PEG-protein A conjugate. Videodensitometric anal. of targeted vesicles-ultrasound backscatter quantitation is shown in a table.

IT 150525-42-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(targeted compns. for diagnostic and therapeutic use)

RN 150525-42-1 CAPLUS

CN 8,10,14-Trioxa-5-aza-9-phosphatriacontanoic acid, 9-hydroxy-4,15-dioxo-12-[(1-oxohexadecyl)oxy]-, 9-oxide, (12R)- (CA INDEX NAME)

Absolute stereochemistry.



L10 ANSWER 15 OF 30 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2001:704741 CAPLUS

DN 135:273165

TI Method for preparation of phosphatidylethanolamine derivatives by amidation of diacylphosphatidylethanolamine with dicarboxylic anhydride

IN Maekawa, Naoya; Oda, Hiroshi; Matsuyoshi, Shigeru

PA NOF Corporation, Japan

SO Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2001261688	A	20010926	JP 2000-79696	20000322
PRAI JP 2000-79696		20000322		

OS CASREACT 135:273165; MARPAT 135:273165

AB The title compds. represented by formula R1OCH2CH(OR2)CH2OP(O)(OM1)OCH2CH2NHCO(CH2)nCO2M2 (R1, R2 = aliphatic acyl; M1, M2 = H, alkali or alkaline earth metal, ammonium; n = an integer of 1-14) are prepared by reaction of diacylphosphatidylethanolamine and dicarboxylic anhydride using an organic solvent not having an active hydrogen, mixing the reaction mixture with a buffer solution (pH 3.5-7.5), separating the organic phase, and removing the organic solvent from the organic phase. This process gives N-acyl-diacylphosphatidylethanolamines (glycerophospholipids) of high purity (≥97%) in high yields (≥90%) and is industrially advantageous since it does not require complicated procedures such as silica gel chromatog. Thus, 10 g dioleoylphosphatidylethanolamine (≥99.5% purity) and 1.66 g Et3N were dissolved in 200 mL CHCl3, treated with 2.2. g glutaric anhydride, stirred at 4° for 1 h, and mixed with 0.5 M AcONa/AcOH buffer (pH 6). The reaction mixture was transferred to a separatory funnel and left to stand for 1 h and the bottom layer was separated The bottom layer was treated again with AcONa/AcOH buffer (pH 6) as described above and the organic layer was separated The organic solvent was distilled off and the residue was dispersed in water for

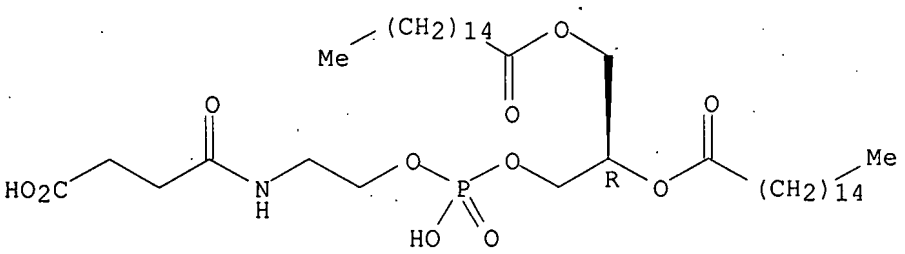
injection and freeze-dried to give 11.6 g 1,2-dioleoyl-sn-glycero-3-phospho-O-(N-glutaryl)ethanolamine sodium salt (99.7% purity) in 97.8% yield.

IT 362685-26-5P
RL: BUU (Biological use, unclassified); IMF (Industrial manufacture); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(method for preparation of phosphatidylethanolamine derivs. as glycerophospholipids by amidation of diacylphosphatidylethanolamine with dicarboxylic anhydride)

RN 362685-26-5 CAPLUS

CN 8,10,14-Trioxa-5-aza-9-phosphatriacontanoic acid, 9-hydroxy-4,15-dioxo-12-[(1-oxohexadecyl)oxy]-, 9-oxide, disodium salt, (12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



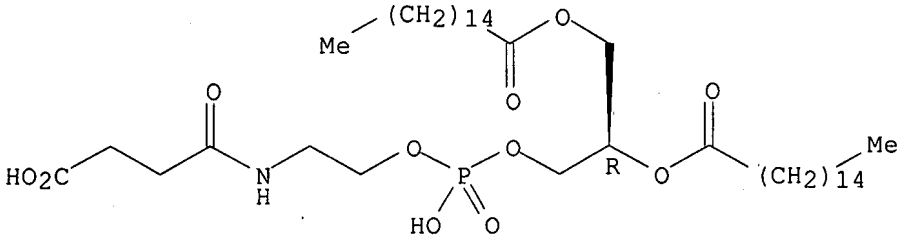
●2 Na

IT 150525-42-1P 248253-94-3P
RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(method for preparation of phosphatidylethanolamine derivs. as glycerophospholipids by amidation of diacylphosphatidylethanolamine with dicarboxylic anhydride)

RN 150525-42-1 CAPLUS

CN 8,10,14-Trioxa-5-aza-9-phosphatriacontanoic acid, 9-hydroxy-4,15-dioxo-12-[(1-oxohexadecyl)oxy]-, 9-oxide, (12R)- (CA INDEX NAME)

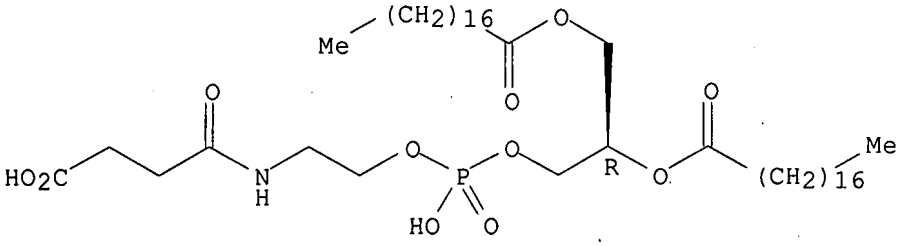
Absolute stereochemistry.



RN 248253-94-3 CAPLUS

CN 8,10,14-Trioxa-5-aza-9-phosphadotriacontanoic acid, 9-hydroxy-4,15-dioxo-12-[(1-oxooctadecyl)oxy]-, 9-oxide, (12R)- (CA INDEX NAME)

Absolute stereochemistry.



L10 ANSWER 16 OF 30 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1999:708880 CAPLUS
DN 131:319884
TI Targetable encapsulated gas microbubbles for separation of target material from liquid samples and separation apparatus
IN Cuthbertson, Alan; Rongved, Pal; Lovhaug, Dagfinn; Fjerdingstad, Hege; Solbakken, Magne; Godal, Aslak
PA Nycomed Imaging As, Norway
SO PCT Int. Appl., 54 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9955837	A2	19991104	WO 1999-GB1317	19990428
	WO 9955837	A3	20000210		
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	CA 2326386	A1	19991104	CA 1999-2326386	19990428
	AU 9937197	A	19991116	AU 1999-37197	19990428
	EP 1073716	A2	20010207	EP 1999-919396	19990428
	EP 1073716	B1	20040428		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	JP 2002512886	T	20020508	JP 2000-545981	19990428
	AT 265525	T	20040515	AT 1999-919396	19990428
	IN 2000MN00515	A	20050715	IN 2000-MN515	20001018
	NO 2000005383	A	20001213	NO 2000-5383	20001026
	US 2003104359	A1	20030605	US 2002-294598	20021115
PRAI	GB 1998-9083	A	19980428		
	GB 1998-9085	A	19980428		
	US 1998-85819P	P	19980518		
	US 1998-85826P	P	19980518		
	WO 1999-GB1317	W	19990428		
	US 2000-694893	B1	20001025		

AB Separation of target material from a liquid sample is achieved by coupling the target to targetable encapsulated gas microbubbles, allowing the microbubbles and coupled target to float to the surface of the sample to form a floating microbubble/target layer, and separating this layer from the sample. In a pos. separation process the microbubbles are then removed from the target, e.g. by bursting. In a neg. separation process target-free sample material is recovered following separation of the floating layer. The method may also be used diagnostically to detect the presence of a disease marker in a sample. Novel separation apparatus is also described. Perfluorobutane gas

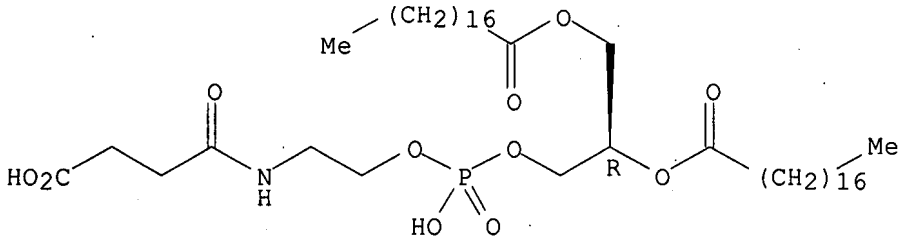
microbubbles encapsulated with distearoylphosphatidylserine doped with Mal-PEG2000-distearoylphosphatidylethanolamine (DSPE) was prepared and reacted with thiolated anti-CD34 antibodies to make a reagent useful for separating CD34-pos. cells.

IT 248253-94-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(targetable encapsulated gas microbubbles for separation of target material from liquid samples and separation apparatus)

RN 248253-94-3 CAPLUS

CN 8,10,14-Trioxa-5-aza-9-phosphadotriacontanoic acid, 9-hydroxy-4,15-dioxo-12-[(1-oxooctadecyl)oxy]-, 9-oxide, (12R)- (CA INDEX NAME)

Absolute stereochemistry.



L10 ANSWER 17 OF 30 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1999:220014 CAPLUS

DN 130:249137

TI Novel targeted ultrasound imaging contrast agents for diagnostic and therapeutic use

IN Unger, Evan C.; Fritz, Thomas A.; Gertz, Edward W.

PA ImarRx Pharmaceutical Corp., USA

SO PCT Int. Appl., 223 pp.
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 8

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9913919	A1	19990325	WO 1998-US18858	19980909
	W: AU, CA				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	US 6139819	A	20001031	US 1997-932273	19970917
	AU 9893830	A	19990405	AU 1998-93830	19980909
	EP 959908	A1	19991201	EP 1998-946919	19980909
	R: DE, FR, GB, IT				
PRAI	US 1997-932273	A	19970917		
	US 1995-497684	B2	19950607		
	US 1996-640464	B2	19960501		
	US 1996-660032	B2	19960606		
	US 1996-666129	A2	19960619		
	WO 1998-US18858	W	19980909		

AB This invention describes novel contrast agents which may be used for diagnostic and therapeutic use. The compns. may comprise a lipid, a protein, polymer and/or surfactant, and a gas, in combination with a targeting ligand. In preferred embodiments, the targeting ligand targets coagula, including emboli and/or thrombi, particularly in patients suffering from an arrhythmic disorder. The contrast media can be used in conjunction with diagnostic imaging, such as ultrasound, as well as therapeutic applications, such as therapeutic ultrasound.

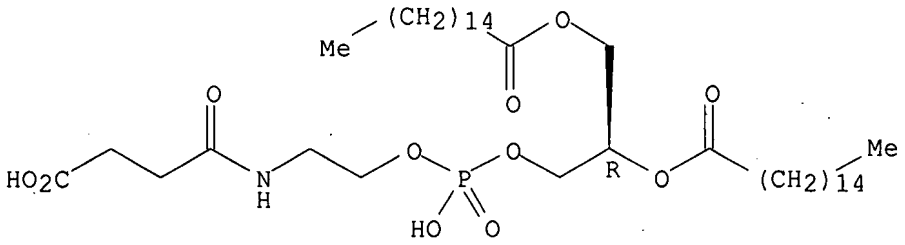
IT 150525-42-1
RL: RCT (Reactant); RACT (Reactant or reagent)

(novel targeted ultrasound imaging contrast agents for diagnostic and therapeutic use)

RN 150525-42-1 CAPLUS

CN 8,10,14-Trioxa-5-aza-9-phosphatriacontanoic acid, 9-hydroxy-4,15-dioxo-12-[(1-oxohexadecyl)oxy]-, 9-oxide, (12R)- (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 18 OF 30 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1997:601246 CAPLUS

DN 127:298616

TI Enhancement of the in vivo circulation lifetime of L-α-distearoylphosphatidylcholine liposomes: importance of liposomal aggregation versus complement opsonization

AU Ahl, Patrick L.; Bhatia, Suresh K.; Meers, Paul; Roberts, Patricia; Stevens, Rachel; Dause, Richard; Perkins, Walter R.; Janoff, Andrew S.

CS The Liposome Company, Inc., Princeton Forrestal Center, One Research Way, Princeton, NJ, 08540-6619, USA

SO Biochimica et Biophysica Acta, Biomembranes (1997), 1329(2), 370-382
CODEN: BBBMBS; ISSN: 0005-2736

PB Elsevier B.V.

DT Journal

LA English

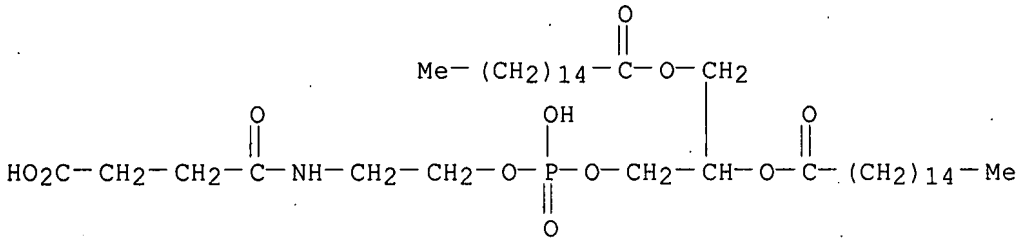
AB Incorporation of N-(ω-carboxy)acylamido-phosphatidylethanolamines (-PEs) into large unilamellar vesicles (LUVs) of L-α-distearoylphosphatidylcholine (DSPC) was found to dramatically increase the in vivo liposomal circulation lifetime in rats, reaching a maximal effect at 10 mol.% of the total phospholipid. Neither pure DSPC liposomes nor those with the longest circulating derivative, N-glutaryl-dipalmitoylphosphatidylethanolamine (-DPPE), were found to significantly bind complement from serum. Therefore, the relatively short circulation time of pure DSPC liposomes did not appear to be related to greater complement opsonization leading to uptake by the reticuloendothelial system. However, N-(ω-carboxy)acylamido-PEs were particularly efficient inhibitors of a limited aggregation detected for pure DSPC liposomes. The aggregation tendency of DSPC liposomes incorporating various structural analogs of N-glutaryl-DPPE correlated inversely with the circulation lifetimes. Therefore, it is concluded that such PE derivs. enhance the circulation time by preventing liposomal aggregation and avoiding a poorly understood mechanism of clearance that is dependent on size but is independent of complement opsonization. At high concns. of N-glutaryl-DPPE (above 10 mol.%), the liposomes exhibited strong complement opsonization and were cleared from circulation rapidly, as were other highly neg. charged liposomes. These data demonstrate that both the lack of opsonization and the lack of a tendency to aggregate are required for long circulation. Liposomal disaggregation via N-(ω-carboxy)acylamido-PEs yields a new class of large unilamellar DSPC liposomes with circulation lifetimes that are comparable to those of sterically stabilized liposomes.

IT 88848-80-0P

RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
(liposomal aggregation vs. complement opsonization in enhancement of circulation lifetime of L-α-distearoylphosphatidylcholine liposomes)

RN 88848-80-0 CAPLUS

CN 8,10,14-Trioxa-5-aza-9-phosphatriacontanoic acid, 9-hydroxy-4,15-dioxo-12-[(1-oxohexadecyl)oxy]-, 9-oxide (9CI) (CA INDEX NAME)



RE.CNT 68 THERE ARE 68 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 19 OF 30 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1997:594622 CAPLUS

DN 127:253188

TI Phospholipid-ligand complexes for enhancing liposomal delivery system

IN Thompson, David H.; Low, Philip S.; Rui, Yuanjin; Wang, Susan

PA Purdue Research Foundation, USA; Thompson, David H.; Low, Philip S.; Rui, Yuanjin; Wang, Susan

SO PCT Int. Appl., 40 pp.
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9731624	A1	19970904	WO 1997-US3077	19970226
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9723169	A	19970916	AU 1997-23169	19970226
PRAI	US 1996-12353P	P	19960227		
	WO 1997-US3077	W	19970226		

OS MARPAT 127:253188

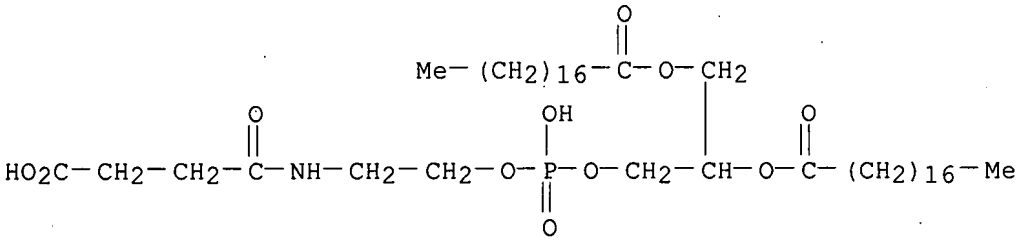
AB An improved liposome and method for delivering an exogenous mol. to the cytoplasm of a cell is described. The liposomal membrane comprises triggerable lipids and lipids complexed to a ligand, wherein the ligand is capable of interacting with cellular membrane to enhance the uptake of the ligand and attached liposome. Diplasmenylcholine 13.6 mg was dissolved in 0.5 mL CHCl3 and 15 μL folate-PEG-distearoylphophatidylethanolamine conjugate was added. The mixture was evaporated with a stream of dry N, then by lyophilization to give a thin film, which was hydrated with 1 mL of propidium iodide solution to disperse the lipid as multilamellar liposomes (MLV).

IT 161693-70-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(phospholipid-ligand conjugates for enhancing liposomal delivery system)

RN 161693-70-5 CAPLUS

CN 8,10,14-Trioxa-5-aza-9-phosphadotriacontanoic acid, 9-hydroxy-4,15-dioxo-12-[(1-oxooctadecyl)oxy]-, 9-oxide (9CI) (CA INDEX NAME)



L10 ANSWER 20 OF 30 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1995:352310 CAPLUS

DN 122:196706

TI Folate-mediated tumor cell targeting of liposome-entrapped doxorubicin in vitro

AU Lee, Robert J.; Low, Philip S.

CS Department of Chemistry, Purdue University, West Lafayette, IN, 47907, USA

SO Biochimica et Biophysica Acta, Biomembranes (1995), 1233(2), 134-44
CODEN: BBBMBS; ISSN: 0005-2736

PB Elsevier B.V.

DT Journal

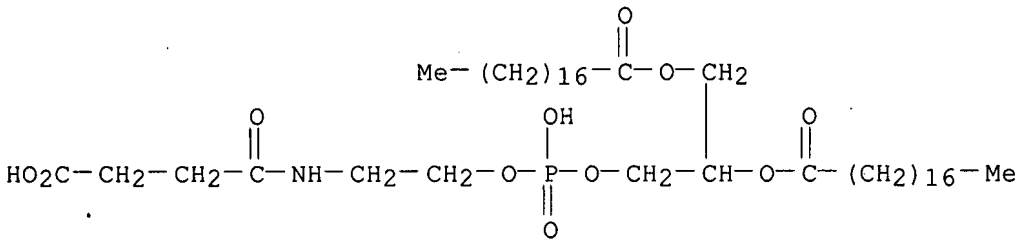
LA English

AB Receptors for the vitamin folic acid are frequently overexpressed on epithelial cancer cells. To examine whether this overexpression might be exploited to specifically deliver liposome-encapsulated drug mols. in vitro, folate-targeted liposomes were prepared by incorporating 0.1 mol% of a folate-polyethylene glycol-distearoylphosphatidylethanolamine (folate-PEG-DSPE) construct into the lipid bilayer, and were loaded with doxorubicin (DOX), an anticancer drug. Uptake of folate-PEG-liposomal DOX by KB cells was 45-fold higher than that of non-targeted liposomal DOX, and 1.6-times higher than that of free DOX, while the cytotoxicity was 86 and 2.7-times higher, resp. Folate-targeting is fully compatible with PEG-coating of the liposomes, since incorporation of 4 mol% PEG2000-DSPE does not reduce the uptake or cytotoxicity of folate-PEG-liposomal DOX. Uptake of folate-PEG-liposomes was inhibited by 1 mM free folic acid but was unaffected by physiol. concns. of folate. In HeLa/WI38 co-cultures, folate-PEG-liposomes encapsulating calcein, a fluorescent dye, were found to be almost exclusively internalized by the HeLa cells which overexpress the folate receptors. Thus, it is suggested that folate targeting constitutes a possible mechanism for improving the specificity of PEG-coated liposomes for cancer cells.

IT 161693-70-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(folate-mediated targeting of doxorubicin encapsulated in PEG-coated liposomes)

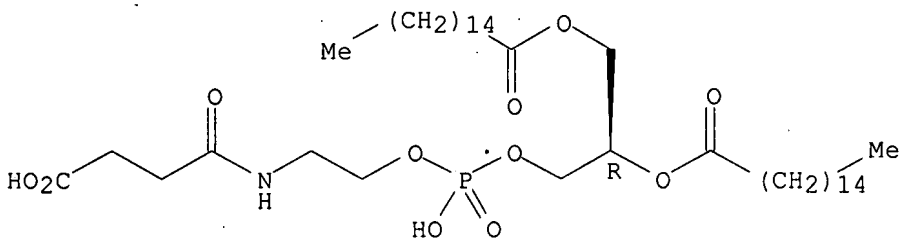
RN 161693-70-5 CAPLUS

CN 8,10,14-Trioxa-5-aza-9-phosphadotriacontanoic acid, 9-hydroxy-4,15-dioxo-12-[(1-oxooctadecyl)oxy]-, 9-oxide (9CI) (CA INDEX NAME)



L10 ANSWER 21 OF 30 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1994:650457 CAPLUS
DN 121:250457
TI Synthesis and Characterization of Chelator-Lipids for Reversible Immobilization of Engineered Proteins at Self-Assembled Lipid Interfaces
AU Schmitt, Lutz; Dietrich, Christian; Tampe, Robert
CS Physik Department, Technische Universitaet Muenchen, Garching, D-85747, Germany
SO Journal of the American Chemical Society (1994), 116(19), 8485-91
CODEN: JACSAT; ISSN: 0002-7863
DT Journal
LA English
OS CASREACT 121:250457
AB In mol. biol. and protein engineering, immobilized metal ion affinity chromatog. (IMAC) using a NTA-chelator is a very powerful technique in identification and isolation of oligo-histidine-tagged fusion proteins. This concept was transferred to the properties of self-assembling systems with the aim of reversible immobilization, orientation of biomols., and functionalization of lipid interfaces. Here are described the synthesis and the chemical and phys. characterization of such metal affinity lipids. The NTA-chelator was coupled either to a phospholipid, DPPE, or to a synthetic lipid, dioctadecylamine. Metal complex formation was investigated by TLC and FTIR techniques. Using film balance techniques the generation of metal sensitive lipid films is demonstrated. In the presence of Ni2+ drastic changes of the area-pressure isotherms were observed Furthermore, the specific ligand binding of imidazole as a model compound for oligo-histidine-tagged fusion proteins to these functionalized metal-lipid films was investigated.
IT 150525-42-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction with (methylcarboxyl)aminoazaoctanecarboxylic acid)
RN 150525-42-1 CAPLUS
CN 8,10,14-Trioxa-5-aza-9-phosphatriacontanoic acid, 9-hydroxy-4,15-dioxo-12-[(1-oxohexadecyl)oxy]-, 9-oxide, (12R)- (CA INDEX NAME)

Absolute stereochemistry.



L10 ANSWER 22 OF 30 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1993:603859 CAPLUS
DN 119:203859
TI Preparation of lipid conjugates of therapeutic peptides and protease inhibitors
IN Basava, Channa; Hostetler, Karl Y.
PA Vical, Inc., USA
SO PCT Int. Appl., 72 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9301828	A1	19930204	WO 1992-US6153	19920722
	W: AU, CA, JP				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE				
	US 5554728	A	19960910	US 1991-734434	19910723
	CA 2113156	A1	19930204	CA 1992-2113156	19920722
	AU 9224251	A	19930223	AU 1992-24251	19920722
	AU 671078	B2	19960815		
	EP 596024	A1	19940511	EP 1992-917096	19920722
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, MC, NL, SE				
	JP 07501316	T	19950209	JP 1992-503064	19920722
	US 5804552	A	19980908	US 1995-458401	19950602
PRAI	US 1991-734434	A	19910723		
	WO 1992-US6153	A	19920722		

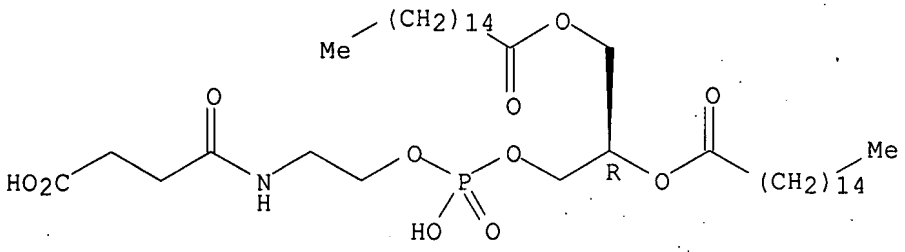
OS MARPAT 119:203859

AB Title compds., comprising therapeutic peptides, including human immunodeficiency virus (HIV) protease inhibitors covalently linked to phospholipids, glycerides, or other membrane-targeting and membrane-anchoring species, and their pharmaceutically acceptable salts, together with processes for their prepns., are described. The invention also provides novel HIV protease inhibitors. The prepared compds. possess useful pharmacol. properties, such as antiviral activity towards viral infection and inhibitory activity towards viral proteases. Therefore, these compds. can be used in the prophylaxis or treatment of viral infections, in particular infections caused by HIV or other retroviruses. The targeting technol. as described for the protease inhibitors is also applicable to a variety of inhibitors of other enzymes. Thus, R-Ala-Ala-D-β-Nal-Pip-OMe (I; R = Ac, β-Nal = β-naphthylalanine, Pip = pipecolic acid), prepared by standard solid-phase methods, had IC50 >100 μM in an antiviral assay, while dipalmitoylglycerophosphatidylethanolamine conjugate I [R = (R)-Me(CH2)14CO2CH[CH2O2C(CH2)14Me]CH2OP(O)(OH)OCH2CH2NHCOCH2CH2CO], prepared via coupling of succinylated ethanolamine derivative ROH with the corresponding peptide, had IC50 = 10 μM.

IT 150525-42-1P 150525-43-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and amidation reactions of, with peptides, in preparation of lipid conjugate protease inhibitors)

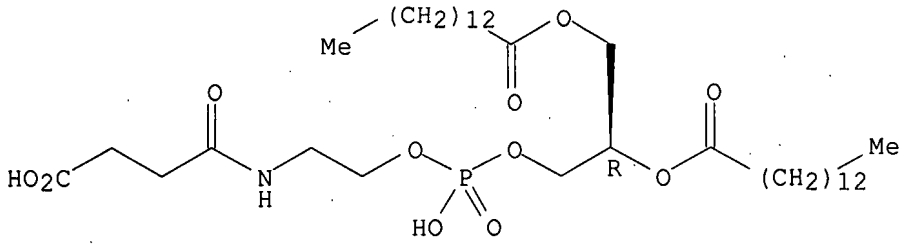
RN 150525-42-1 CAPLUS
CN 8,10,14-Trioxa-5-aza-9-phosphatriacontanoic acid, 9-hydroxy-4,15-dioxo-12-[(1-oxohexadecyl)oxy]-, 9-oxide, (12R)- (CA INDEX NAME)

Absolute stereochemistry.



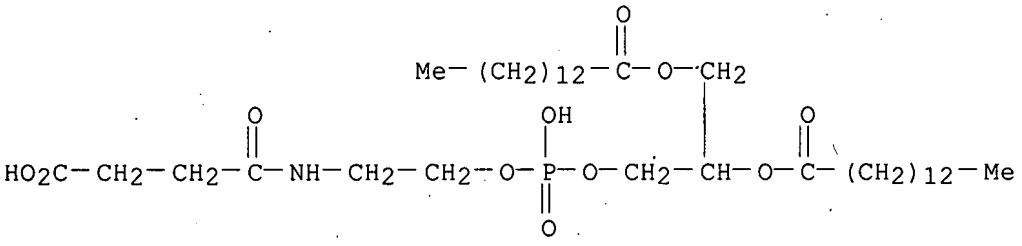
RN 150525-43-2 CAPLUS
CN 8,10,14-Trioxa-5-aza-9-phosphaoctacosanoic acid, 9-hydroxy-4,15-dioxo-12-[(1-oxotetradecyl)oxy]-, 9-oxide, (R)- (9CI) (CA INDEX NAME)

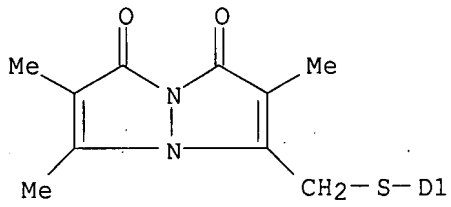
Absolute stereochemistry.



L10 ANSWER 23 OF 30 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1993:249864 CAPLUS
DN 118:249864
TI Interbilayer transfer of phospholipid-anchored macromolecules via monomer diffusion
AU Silvius, John R.; Zuckermann, Martin J.
CS Dep. Biochem., McGill Univ., Montreal, QC, H3G 1Y6, Can.
SO Biochemistry (1993), 32(12), 3153-61
CODEN: BICHAW; ISSN: 0006-2960
DT Journal
LA English
AB A series of conjugates was prepared by linking various hydrophilic macromols. [poly(ethylene glycols), polylysine, aminodextrans, or apotransferrin] to synthetic phosphatidylethanolamines via linker moieties incorporating a fluorescent bimane group. Using a fluorescence energy transfer-based assay, the rate of transfer of these species between phospholipid vesicles was monitored as a function of the nature and size of the coupled macromol. and of the acyl chain composition of the lipid anchor. Conjugates in which the phospholipid anchor is linked to a small hydrophilic terminal residue (e.g., ethanolamine or ethylenediamine) transfer between large unilamellar vesicles of egg phosphatidylcholine with half-times ranging from tens of minutes (for dimyristoyl lipid conjugates) to a few tens of hours (for dipalmitoyl and 1-palmitoyl-2-oleoyl lipid conjugates), in agreement with previous results for unlabeled phospholipids. Conjugation of these same lipid anchors to larger hydrophilic mols. markedly accelerates their rates of intermembrane transfer, by factors ranging from 5-7-fold (for conjugates with apotransferrin and aminodextrans of mol. weight 10,000-70,000) to over 25-fold [for conjugates with poly(ethylene glycol)-5000]. In all cases the observed transfer appears to reflect the diffusion of lipid monomers through the aqueous phase. These results suggest that substantial intermembrane transfer can occur, on a time scale of several hours or less, for hydrophilic macromols. conjugated to diacyl(/alkyl) lipids with 14- to 18-carbon chains unless portions of the conjugate other than the lipid anchors also interact strongly with the membrane.

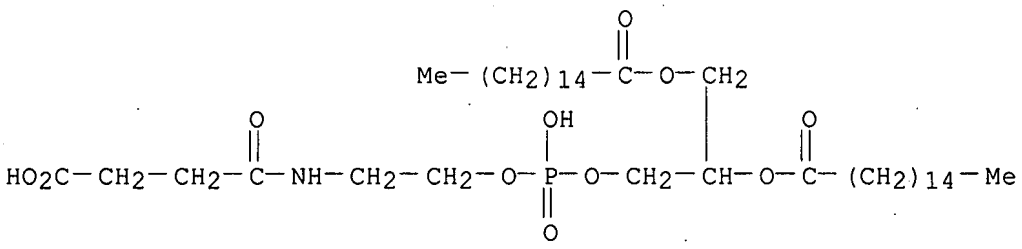
IT 147793-19-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction with amines and interbilayer transfer of)
RN 147793-19-9 CAPLUS
CN Tetradecanoic acid, 1-[10-carboxy-3-hydroxy-3-oxido-8-oxo-9(or 10)-[[(2,5,6-trimethyl-1,7-dioxo-1H,7H-pyrazolo[1,2-a]pyrazol-3-yl)thio]methyl]-2,4-dioxa-7-aza-3-phosphadec-1-yl]-1,2-ethanediyl ester (9CI) (CA INDEX NAME)





L10 ANSWER 24 OF 30 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1992:200949 CAPLUS
DN 116:200949
TI Influence of the galactosyl ligand structure on the interaction of galactosylated liposomes with mouse peritoneal macrophages
AU Haensler, Jean; Schuber, Francis
CS Fac. Pharm., Univ. Louis Pasteur, Illkirch, 67041, Fr.
SO Glycoconjugate Journal (1991), 8(2), 116-24
CODEN: GLJOEW; ISSN: 0282-0080
DT Journal
LA English
AB Liposomes bearing at their surface mono- and triantennary galactosyl ligands were prepared and their interaction with the galactose receptor of mouse peritoneal macrophages studied. Triantennary structures were synthesized by coupling derivs. of 1-thio-β-D-galactose to the amino groups of lysyl-lysine dipeptide. Galactosyl liposomes were obtained either by synthesis of neo-galactolipids followed by their incorporation into the vesicles or by neo-galactosylation of preformed liposomes by reaction between thiol-functionalized galactosyl ligands and vesicles bearing maleimido groups. The interaction of the galactosylated liposomes with the macrophage lectin was remarkably sensitive to the topol. of the ligands, i.e., a spacer-arm length about 3 nm was necessary and, in contrast to results obtained with the galactose receptor of other cells, the triantennary structure did not provide addnl. binding. Related to the strategy of drug delivery with targeted liposomes, these results indicate that lectins from different cells might possibly be distinguished by using multiantennary ligands having optimal geometries.
IT 88848-80-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with galactose derivs., interaction with peritoneal macrophages in liposomes in relation to)
RN 88848-80-0 CAPLUS

CN 8,10,14-Trioxa-5-aza-9-phosphatriacontanoic acid, 9-hydroxy-4,15-dioxo-12-[(1-oxohexadecyl)oxy]-, 9-oxide (9CI) (CA INDEX NAME)

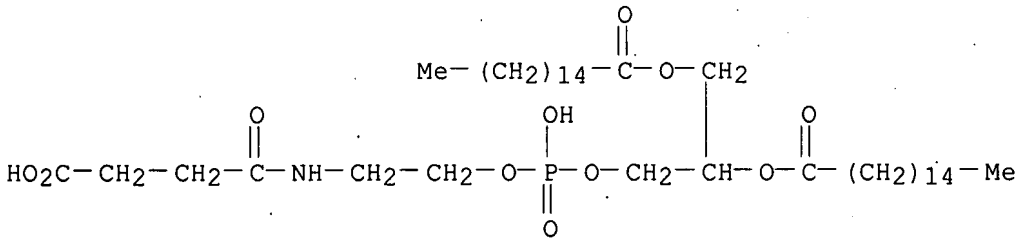


L10 ANSWER 25 OF 30 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1991:627813 CAPLUS
DN 115:227813
TI Carboxyacyl derivatives of phospholipid, and carbodiimide method for sensitizing liposome with antigen or antibody for liposome lysis immunoassay
IN Umeda, Mamoru; Kobayashi, Reiji
PA Nissui Seiyaku Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 03073856	A	19910328	JP 1989-209789	19890814
PRAI JP 1989-209789		19890814		

AB Carboxyacyl derivs. of phospholipid are used to introduce antigen or antibody to the surface of liposome which encapsulates a hydrophilic label for liposome lysis immunoassay for diagnosing endocrine disease. With the liposome, the immunoassay is simple and sensitive, and is not influenced by complement interference, i.e. antigen-antibody complex formation-independent lysis. Thus, N-succinyl, glutamyl, adipoyl, pimeloyl, suberyl, sebacioyl, (11-carboxyimidecanoyl), and (13-carboxytridecanoyl) dipalmitoylphosphatidylethanolamine were prepared from dipalmitoyl phosphatidylethanolamine and succinic; glutaric; adipic; pimelic; suberic; sebacic; decadicarboxylic; and dodecanedicarboxylic anhydrides, and were used to link anti-C-reactive protein (CRP) IgG with liposome by adding ethyldimethylpropylaminocarbodiimide. The IgG sensitized liposome was then used for CRP determination in human blood.

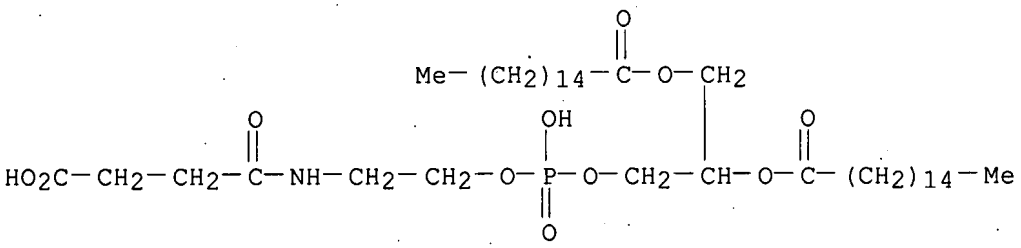
IT 88848-80-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, for sensitizing liposome with antigen or antibody via carbodiimide, for preventing complement interference in liposome lysis immunoassay)
RN 88848-80-0 CAPLUS
CN 8,10,14-Trioxa-5-aza-9-phosphatriacontanoic acid, 9-hydroxy-4,15-dioxo-12-[(1-oxohexadecyl)oxy]-, 9-oxide (9CI) (CA INDEX NAME)



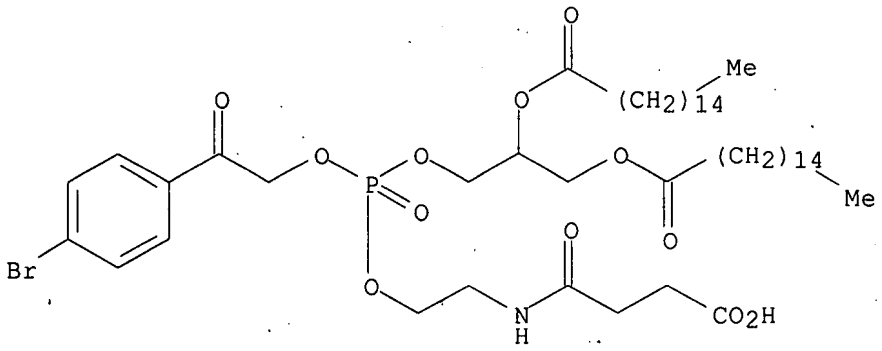
L10 ANSWER 26 OF 30 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1990:154774 CAPLUS
DN 112:154774
TI Method for preparing phosphodiester conjugates useful for preparing immunoactive liposomes
IN Law, Say Jong
PA Ciba Corning Diagnostics Corp., USA
SO Eur. Pat. Appl., 8 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 307175	A2	19890315	EP 1988-308254	19880907
	EP 307175	A3	19900328		
	EP 307175	B1	19950322		
	R: AT, BE, CH, DE, ES, FR, GB, IT, LI				
	CA 1340413	C	19990302	CA 1988-571365	19880707
	JP 01107152	A	19890425	JP 1988-224362	19880907
	JP 08007218	B	19960129		
	AT 120276	T	19950415	AT 1988-308254	19880907
	ES 2071618	T3	19950701	ES 1988-308254	19880907
PRAI	US 1987-94667	A	19870909		

OS MARPAT 112:154774
AB A method for preparing a phosphodiester-ligand-analyte conjugate comprises reacting a polar phospholipid R1CH2CHR2CH2OP(:O)(OH)OR3 [R1, R2 = H, OH, R', OR', O2CR'; R' = C1-24 (un)saturated, (un)branched alkyl or alkylene; R3 = C1-24 (un)branched alkylamine] with a ligand (reactive at R3) and reacting this conjugate with an analyte (preferably thyroxine or triiodothyronine) through the ligand. The final conjugate can be used to form liposomes for use in immunoassays. Thus, phosphatidylethanolamine succinate (PE-Suc) was formed from the reaction of (1,2-dipalmitoyl-3-rac-phosphatidyl)ethanolamine 440 with succinic anhydride 76 mg and triethylamine 0.09 mL in 40 mL HCONMe2:CHCl3 (1:1) for 1.5 h at 65°. PE-Suc 402 mg in CHCl3 was then reacted with triethylamine 100 μL, followed by Et chlorformate 65 μL, L-thyroxine (T4) Na salt 406 mg, and DMF 10 mL at 0°. The PE-Suc-T4 conjugate was purified by TLC and 0.95 mg was combined in CHCl3 with L-dipalmitoylphosphatidylcholine 125, cholesterol 67.5, and L-dipalmitoylphosphatidylglycerol 11.5 mg to form a dry lipid film which was mixed with glucose-6-phosphate dehydrogenase (37.5 kilounits) in 2% glycerol to form liposomes which were used in an enzyme membrane immunoassay.
IT 88848-80-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, in liposome preparation for immunoassays)
RN 88848-80-0 CAPLUS
CN 8,10,14-Trioxa-5-aza-9-phosphatriacontanoic acid, 9-hydroxy-4,15-dioxo-12-[(1-oxohexadecyl)oxy]-, 9-oxide (9CI) (CA INDEX NAME)



L10 ANSWER 27 OF 30 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1986:438652 CAPLUS
DN 105:38652
TI Use of phosphotriester synthetic methods for preparation of phosphatidylethanolamine-analyte conjugates
AU Law, Say Jong; Myles, Arthur
CS Dep. Mol. Biol. Immunol., Collaborative Res., Inc., Lexington, MA, 02173, USA
SO Tetrahedron Letters (1986), 27(3), 271-4
CODEN: TELEAY; ISSN: 0040-4039
DT Journal
LA English
AB Amphiphilic phosphatidylethanolamine conjugates of therapeutically or biol. active analytes were prepared by using a new phosphotriester synthetic approach and used for functionalization of liposomes. Protected phosphatidylethanolamine phosphotriester intermediates were prepared and directly coupled to penicillin G and indirectly coupled via a succinamide ligand, to L-thyroxine. The deprotected conjugates were used for preparation of analyte functionalized liposomes which form the basis of highly reproducible and sensitive assays for penicillin and thyroxine.
IT 94451-77-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction with thyroxine)
RN 94451-77-1 CAPLUS
CN 8,10,14-Trioxa-5-aza-9-phosphatriacontanoic acid, 9-[2-(4-bromophenyl)-2-oxoethoxy]-4,15-dioxo-12-[(1-oxohexadecyl)oxy]-, 9-oxide (9CI) (CA INDEX NAME)

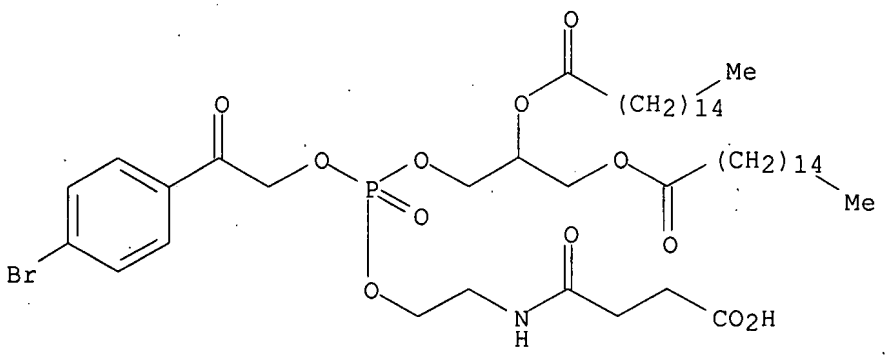


L10 ANSWER 28 OF 30 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1985:58884 CAPLUS
DN 102:58884
TI Use of phosphotriester intermediates for preparation of functionalized liposomes
IN Myles, Arthur; Law, Say Jong; Cole, Frank X.
PA Collaborative Research, Inc., USA

SO U.S., 12 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

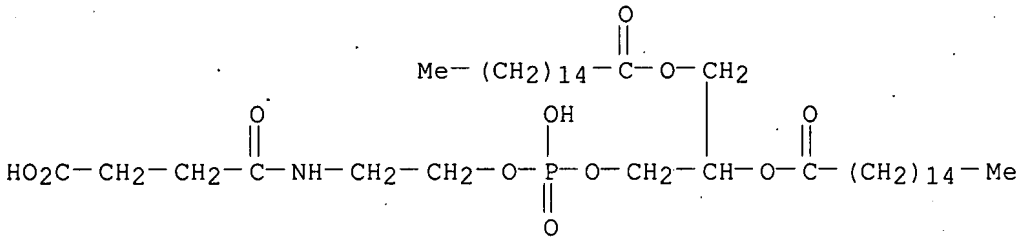
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4480041	A	19841030	US 1982-396678	19820709

PRAI US 1982-396678 19820709
OS MARPAT 102:58884
AB Liposomes covalently labeled with analytes (e.g., antibiotics, drugs, hormones, other antigens) on their outer surfaces and containing entrapped enzymes are prepared for enzyme-membrane immunoassays (liposome immunoassays) by using phospholipids derivatized with the desired analyte (or with a ligand spacer and analyte) which are prepared via phosphotriester intermediates. int: the derivatized phospholipids can be prepared in multigram quantities and then incorporated into the liposomes. Natural or synthetic amphiphilic phospholipids, and especially phosphatidylethanolamines, may be used as starting materials. Thus, for the determination of T4, β,γ-dipalmitoyl-DL-α-phosphatidylethanolamine was protected with the BOC (tert-butoxycarbonyl) group, and the protected product was treated with α,p-dibromoacetophenone to form the triester N-tert-butoxycarbonyl-β,γ-dipalmitoyl-DL-α-phosphatidylethanolamine 2-(4-bromophenyl)-2-oxoethyl ester. The latter compound was deprotected, and the deprotected product then was treated with succinic anhydride to form N-succinyl-β,γ-dipalmitoyl-DL-α-phosphatidylethanolamine 2-(4-bromophenyl)-2-oxoethyl) ester which was treated with L-T4 to give a conjugate. The conjugate, after removal of the 2-(4-bromophenyl)-2-oxoethyl group, gave the desired T4-derivatized phosphatidylethanolamine. The latter compound was used along with lecithin and cholesterol to prepare liposomes that were loaded with alkaline phosphatase and used for the determination of T4 by immunoassay.
IT 94451-77-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, with thyroxine)
RN 94451-77-1 CAPLUS
CN 8,10,14-Trioxa-5-aza-9-phosphatriacontanoic acid, 9-[2-(4-bromophenyl)-2-oxoethoxy]-4,15-dioxo-12-[(1-oxohexadecyl)oxy]-, 9-oxide (9CI) (CA INDEX NAME)



L10 ANSWER 29 OF 30 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1984:83795 CAPLUS
DN 100:83795
TI An alternative procedure for the preparation of immunogenic liposomal model membranes
AU Kinsky, Stephen C.; Loader, Joan E.; Benson, Amy L.
CS Dep. Pediatr., Natl. Jew. Hosp., Denver, CO, 80206, USA

SO Journal of Immunological Methods (1983), 65(3), 295-306
CODEN: JIMMBG; ISSN: 0022-1759
DT Journal
LA English
AB A new procedure for the preparation of immunogenic liposomes is described which circumvents the need to synthesize the N-(hapten)-substituted derivs. of phosphatidylethanolamine that were previously employed for this purpose. The method is based on the generation of liposomes containing the N-hydroxysuccinimide (NHS) esters of either palmitic acid, cholesteryl-hemisuccinate, or N-succinyl-phosphatidylethanolamine. Reaction of these performed liposomes with a hapten that possesses a substitutable amino group [e.g., dinitrophenyl (DNP)-lysine] results in covalent attachment of the hapten to the plaque-forming cells in mice. The reliability of this procedure is indicated by the fact that these liposomes share the essential immunol. properties of liposomes sensitized by incorporation of N-substituted phosphatidylethanolamine derivs. The magnitude of the response was dependent on: (a) the presence of lipid A in the liposomes; (b) the phospholipid composition of the liposomes; (c) the distance separating the DNP determinant from the liposomal surface. Addnl. applications of liposomes, which contain the NHS esters, are discussed.
IT 88848-80-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 88848-80-0 CAPLUS
CN 8,10,14-Trioxa-5-aza-9-phosphatriacontanoic acid, 9-hydroxy-4,15-dioxo-12-[(1-oxohexadecyl)oxy]-, 9-oxide (9CI) (CA INDEX NAME)



L10 ANSWER 30 OF 30 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1983:54497 CAPLUS
DN 98:54497
TI Phosphorylated derivatives, pharmaceutical compositions containing such derivatives, and their use
IN Baschang, Gerhard; Hartmann, Albert; Wacker, Oskar; Tarcsay, Lajos
PA Ciba-Geigy A.-G. , Switz.
SO Eur. Pat. Appl., 182 pp.
CODEN: EPXXDW
DT Patent
LA German
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 56992	A1	19820804	EP 1982-100445	19820122
R: AT, BE, CH, DE, FR, IT, LU, NL, SE				
US 4423038	A	19831227	US 1982-340680	19820119
FI 8200178	A	19820724	FI 1982-178	19820120
GB 2092591	A	19820818	GB 1982-1709	19820121
GB 2092591	B	19840704		
ES 508944	A1	19840701	ES 1982-508944	19820121
CA 1190221	A1	19850709	CA 1982-394632	19820121
DK 8200282	A	19820724	DK 1982-282	19820122
NO 8200200	A	19820726	NO 1982-200	19820122

	NO 152904	B	19850902		
	NO 152904	C	19851211		
	AU 8279751	A	19820729	AU 1982-79751	19820122
	JP 57142996	A	19820903	JP 1982-8742	19820122
	ZA 8200433	A	19821229	ZA 1982-433	19820122
	DD 202169	A5	19830831	DD 1982-236918	19820122
	HU 26858	A2	19830928	HU 1982-189	19820122
	IL 64847	A	19860228	IL 1982-64847	19820122
	ES 522435	A1	19850101	ES 1983-522435	19830516
	ES 528142	A1	19860416	ES 1983-528142	19831216
PRAI	CH 1981-439	A	19810123		

OS MARPAT 98:54497

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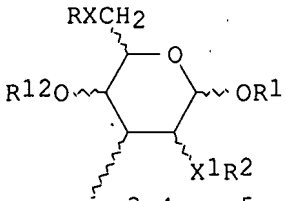


$OCR^3R^4CONR^5CR^6R^7CONR^8CH(COR^9)CH_2CHR^{10}COR^{11}$ I

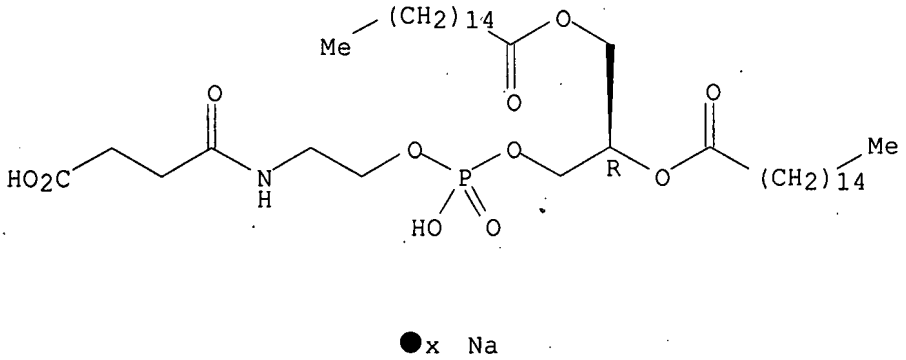
AB Glycopeptides I [X, X1 = O, NR13 (R13 = H, alkyl); R, R1, R2, R12 = (ZZ1Z2)nR14 [Z = CO, CS; Z1 = (un)substituted alkylene; Z2 = O, NR13; R14 = P(O)(OH)OR15 (R15 = aliphatic or cycloaliph. group with ≥7 C atoms), P(O)(OH)OCHR16R17 [R16 = H; R17 = CH2CH2OH, CH(OH)CH2OH; R16, R17 = esterified or etherified CH2OH]; n = 0, 1]; R3, R4, R5, R7, R8 = H, alkyl; R6 = H, alkyl, X2(Z3Z4Z5)mR18 [X2 = O, S, NR13; Z3 = CO, CS; Z4 = (un)substituted alkylene; Z5 = O, NR13, R18 = P(O)(OH)OR15, P(O)(OH)OCHR16R17; m = 0, 1]; R5R6 = 1,3- or 1,4-alkylene; R9, R11 = Z6Z7Z8R19 [Z6 = O, S, NR13, Z7 = (un)substituted alkylene; Z8 = O, NR13; R19 = P(O)(OH)OR15, P(O)(OH)OCHR16R17]; R10 = H, free or esterified or amidated CO2H] were prepared as immunomodulators. Thus, N-acetylnormuramyl-L-alanyl-D-isoglutamine was esterified with Ph2C:N2 to give the corresponding γ-diphenylmethyl ester, which was acylated with succinic anhydride to give the corresponding 6-O-succinoyl derivative, which was esterified with N-hydroxysuccinimide by DCC to give the corresponding succinimido ester. The latter was condensed with 2-(1,2-dipalmitoyl-sn-glycero-3-hydroxyphosphoryloxy)ethylamine to give a product, which had its diphenylmethyl ester cleaved by hydrogenolysis over Pd/BuSO4 to give N-acetyl-6-O-[[N-2-(1,2-dipalmitoyl-sn-glycero-3-hydroxyphosphoryloxy)ethyl]succinamoyl]normuramyl-L-alanyl-D-isoglutamine.

IT 84228-13-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, with muramyl dipeptide derivative)

RN 84228-13-7 CAPLUS

CN 8,10,14-Trioxa-5-aza-9-phosphatriacontanoic acid, 9-hydroxy-4,15-dioxo-12-[(1-oxohexadecyl)oxy]-, 9-oxide, sodium salt, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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FULL SCREEN SEARCH COMPLETED -     1340 TO ITERATE

100.0% PROCESSED     1340 ITERATIONS                                 10 ANSWERS
SEARCH TIME: 00.00.01

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=> d scan

L12  10 ANSWERS   REGISTRY . COPYRIGHT 2007 ACS on STN
IN   9,11,15-Trioxa-6-aza-10-phosphatritriacontanoic acid, 10-hydroxy-5,16-
     dioxo-13-[(1-oxooctadecyl)oxy]-, 10-oxide, ester with octaglycerol (9CI)
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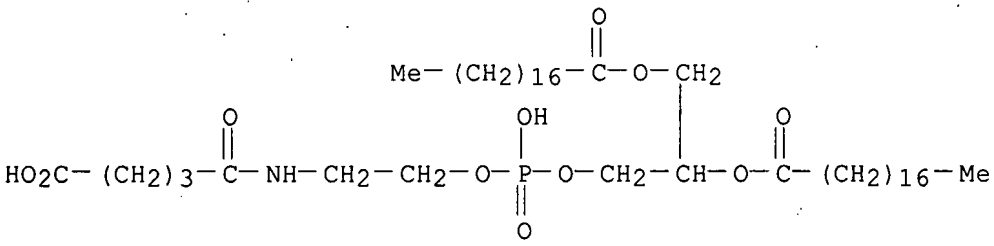

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FILE COVERS 1907 - 21 Jun 2007 VOL 146 ISS 26

FILE LAST UPDATED: 20 Jun 2007 (20070620/ED)

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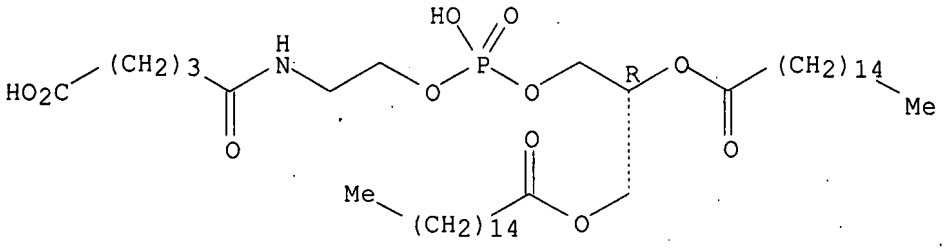
L13 21 L12

=> d l13 1-21 bib abs hitstr

L13 ANSWER 1 OF 21 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2007:82183 CAPLUS
DN 146:333479
TI DNA-Oligonucleotide Encapsulating Liposomes as a Secondary Signal Amplification Means
AU Edwards, Katie A.; Baeumner, Antje J.
CS Department of Biological and Environmental Engineering, Cornell University, Ithaca, NY, 14853, USA
SO Analytical Chemistry (2007), 79(5), 1806-1815
CODEN: ANCHAM; ISSN: 0003-2700
PB American Chemical Society
DT Journal
LA English
AB A novel liposome-based signal amplification system was developed by encapsulating DNA oligonucleotides within antibody-tagged liposomes and subsequently detecting the oligonucleotide with dye-encapsulating liposomes for double signal enhancement. In this sandwich immunoassay, the model analyte, protective antigen protein from Bacillus anthracis, was captured by one set of antibodies immobilized in microtiter plate wells and detected using a second antibody conjugated to oligonucleotide-encapsulating liposomes. Bound liposomes were lysed releasing the encapsulated fluorescein-tagged DNA 25-mer probe, which was then permitted to hybridize with its complementary sequence immobilized in a second plate. Finally, the amount of oligonucleotide was detected through the addition of anti-fluorescein antibody tagged dye-encapsulating liposomes. These secondary liposomes allowed for a .apprx.400+ lower LOD than detection of the fluorescein-labeled probe alone. Several aspects were investigated, including the encapsulation of various oligonucleotide concns. within liposomes; oligonucleotide hybridization times and buffers; degree of anti-fluorescein antibody coverage on the liposomes; and immobilized anti-protective antigen antibody concentration The authors found that the encapsulation efficiency increased with the starting oligonucleotide concentration As many as 4000 DNA 25-mers were successfully entrapped in the liposome, and minimal leakage was observed over the course of 8 mo. When used in the sandwich immunoassay, a limit of detection of 4.1 ng/mL protective antigen was observed with an upper limit of 5000 ng/mL. Due to the endless combination of DNA oligonucleotide sequences, this assay lends itself perfectly for multiplexing on the order of tens to hundreds of analytes.
IT 184904-19-6
RL: ARU (Analytical role, unclassified); BUU (Biological use, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(liposomes containing; DNA-oligonucleotide encapsulating antibody-tagged liposomes as secondary signal amplification means)
RN 184904-19-6 CAPLUS
CN 9,11,15-Trioxa-6-aza-10-phosphahentriacontanoic acid, 10-hydroxy-5,16-dioxo-13-[(1-oxohexadecyl)oxy]-, 10-oxide, (13R)- (CA INDEX NAME)

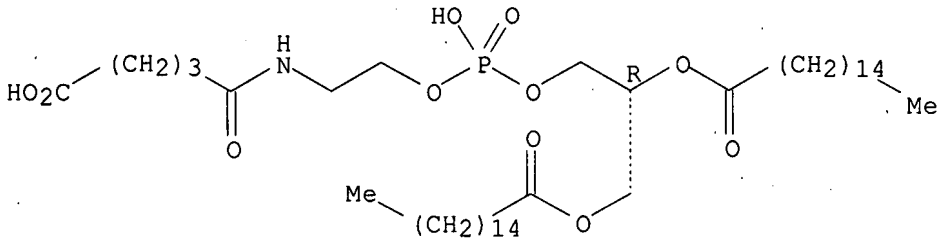
Absolute stereochemistry.



RE.CNT 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 2 OF 21 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2006:1199823 CAPLUS
DN 146:212403
TI In vitro assessment of transferrin-conjugated liposomes as drug delivery systems for inhalation therapy of lung cancer
AU Anabousi, Samah; Bakowsky, Udo; Schneider, Marc; Huwer, Hanno; Lehr, Claus-Michael; Ehrhardt, Carsten
CS Saarland University, Biopharmaceutics and Pharmaceutical Technology, Saarbruecken, 66123, Germany
SO European Journal of Pharmaceutical Sciences (2006), 29(5), 367-374
CODEN: EPSCED; ISSN: 0928-0987
PB Elsevier B.V.
DT Journal
LA English
AB Most human tumors over-express receptors for growth factors and peptide hormones, which are being increasingly studied as a means to selectively deliver cytotoxic agents. An example being the transferrin receptor (TfR, CD71). Here, the authors studied expression levels and location of TfR in different lung epithelial cell types (i.e., bronchial and alveolar epithelial cells) by flow-cytometry and confocal laser scanning microscopy (CLSM). Furthermore, the authors assessed uptake levels and cytotoxicity of transferrin (Tf)-conjugated liposomes in vitro. TfR was found to be expressed at a significantly higher level in bronchial epithelial cells compared with their alveolar counterparts. Cells of cancerous origin (i.e., A549 cell line) showed a higher TfR expression level than healthy alveolar epithelial type II cells in primary culture. CLSM revealed TfR to be located primarily at the basolateral aspect of cells, with the exception of cells undergoing mitotic proliferation, which also showed TfR at their apical membranes, due to their loss of cell polarity. Higher expression levels of TfR correlated well with enhanced uptake of Tf-liposomes and increased levels of cytotoxicity. Liposome uptake was temperature-dependent and inhibitable by excess free Tf. Tf-conjugated liposomes appear as good candidates for an approach to deliver cytostatic drugs to sites of lung cancer by inhalation.
IT 184904-19-6
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(in vitro assessment of transferrin-conjugated liposomes as drug delivery systems for inhalation therapy of lung cancer)
RN 184904-19-6 CAPLUS
CN 9,11,15-Trioxa-6-aza-10-phosphahentriacontanoic acid, 10-hydroxy-5,16-dioxo-13-[(1-oxohexadecyl)oxy]-, 10-oxide, (13R)- (CA INDEX NAME)

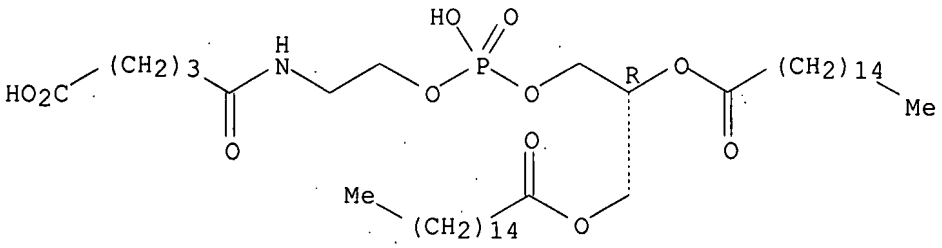
Absolute stereochemistry.



RE.CNT 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 3 OF 21 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2006:1064013 CAPLUS
DN 146:386521
TI Effect of PEGylation on the stability of liposomes during nebulisation and in lung surfactant
AU Anabousi, Samah; Kleemann, Elke; Bakowsky, Udo; Kissel, Thomas; Schmehl, Thomas; Gessler, Tobias; Seeger, Werner; Lehr, Claus-Michael; Ehrhardt, Carsten
CS Department of Biopharmaceutics and Pharmaceutical Technology, Saarland University, Saarbruecken, 66123, Germany
SO Journal of Nanoscience and Nanotechnology (2006), 6(9/10), 3010-3016
CODEN: JNNOAR; ISSN: 1533-4880
PB American Scientific Publishers
DT Journal
LA English
AB Oral inhalation of anticancer drugs or drug delivery system is a novel therapeutic approach in the treatment of lung cancer and requires formulations which are sufficiently stabile during nebulization and subsequent interaction with the surfactant lining of the lungs. In this study, we assessed the stability of plain and PEGylated transferrin-conjugated liposomes after nebulization using two different nebulisers (i.e., air-jet and ultrasonic type). Furthermore, the integrity of the liposomal membranes was assessed after incubation in com. lung surfactant solns. (Alveofact). All liposomal formulations showed no significant changes in their size after nebulization, independent of the type of nebuliser or the liposomal formulation, resp. However, PEGylation was of advantage when it came to interactions between liposomes and the surfactant lining of the lungs. PEGylated liposomes were significantly more stable and retained >80% of their drug load over 48 h, which is more than sufficient time for the drug carriers to be taken up by transferrin receptor over-expressing cancer cells in the lung. In conclusion, PEGylated and plain Tf-conjugated liposomes are stable enough to undergo nebulization in the course of an inhalational therapy, but PEG-stabilization results in a higher degree of membrane integrity in lung surfactant.
IT 184904-19-6
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(PEGylation effect on stability of liposomes during nebulisation and in lung surfactant)
RN 184904-19-6 CAPLUS
CN 9,11,15-Trioxa-6-aza-10-phosphahentriacontanoic acid, 10-hydroxy-5,16-dioxo-13-[(1-oxohexadecyl)oxy]-, 10-oxide, (13R)- (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 4 OF 21 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2006:976212 CAPLUS
DN 145:342468
TI Liposome compositions containing phosphatidylethanolamine dicarboxylate derivatives
IN Okada, Kazushi; Ibuki, Tadayuki; Kim, Dong Hyeon; Fujisawa, Tadashi
PA Mebiopharm Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 16pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2006248978	A	20060921	JP 2005-67469	20050310
	WO 2006099169	A2	20060921	WO 2006-US8650	20060308
	WO 2006099169	A3	20070222		
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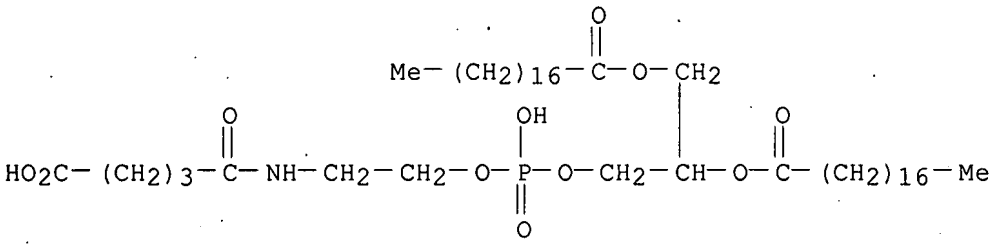
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	US 2006222696	A1	20061005	US 2006-371586	20060308
PRAI	JP 2005-67469	A	20050310		

OS MARPAT 145:342468
AB The invention relates to a drug-containing liposome composition consisting of phospholipids and cholesterol, wherein the phospholipids include phosphatidylethanol amine dicarboxylate derivative 1-12 mol% to the total phospholipids, and does not include non-derivatized phosphatidylethanol amine. The liposome is modified with a ligand having an affinity to target cells through the phosphatidylethanolamine dicarboxylate derivative The liposome composition enables providing appropriate blood retention property of the active component. For example, liposome composition containing oxaliplatin as an active component was prepared from oxaliplatin sucrose solution, distearoylphosphatidylcholine, cholesterol, and N-glytaryl-distearoylphosphatidylethanolamine 2:1:0.2. The oxaliplatin-containing liposome was treated with EDC, N-Hydroxysulfosuccinimide, and then transferrin to modify the liposome with transferrin. The blood retention property and antitumor effect of the liposome in tumor-bearing mice were examined
IT 150150-68-8DP, conjugates with transferrin
RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); THU

(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(liposome compns. containing phosphatidylethanolamine dicarboxylate derivs. conjugated with cell-targeting ligands)

RN 150150-68-8 CAPLUS

CN 9,11,15-Trioxa-6-aza-10-phosphatritriacontanoic acid, 10-hydroxy-5,16-dioxo-13-[(1-oxooctadecyl)oxy]-, 10-oxide (9CI) (CA INDEX NAME)



L13 ANSWER 5 OF 21 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2005:1001834 CAPLUS

DN 143:282132

TI Multiplex detection probes for microarray assays

IN Murakami, Taku

PA Hitachi Chemical Research Center, Inc., USA; Hitachi Chemical Co., Ltd.

SO PCT Int. Appl., 43 pp.
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

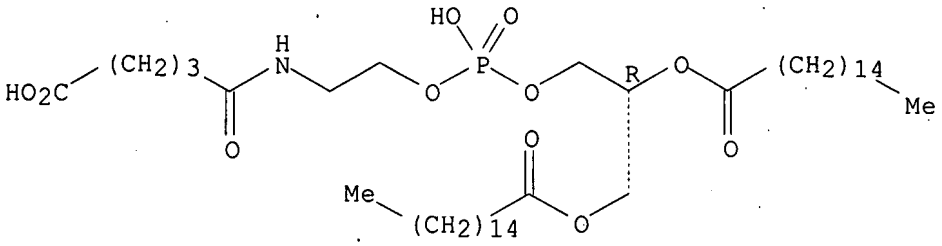
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005084210	A2	20050915	WO 2005-US5955	20050228
	WO 2005084210	A3	20051110		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	EP 1718662	A2	20061108	EP 2005-723710	20050228
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS				
PRAI	US 2004-548635P	P	20040227		
	WO 2005-US5955	W	20050228		

AB The present invention comprises detection probes utilizing vesicles or soluble bodies to retain multiple mass tag mols. The detection probes may be used to simultaneously assay a plurality of different biol. samples, each comprising a plurality of analytes, by immobilizing the analytes from each of the samples on a surface incubating the surface with a set of the detection probes, each having mass tag mols. with different masses, removing the unbound detection probe, collecting the first and second mass tag mols. from the bound detection probe, and quantifying the first and second mass tag mols. collected.

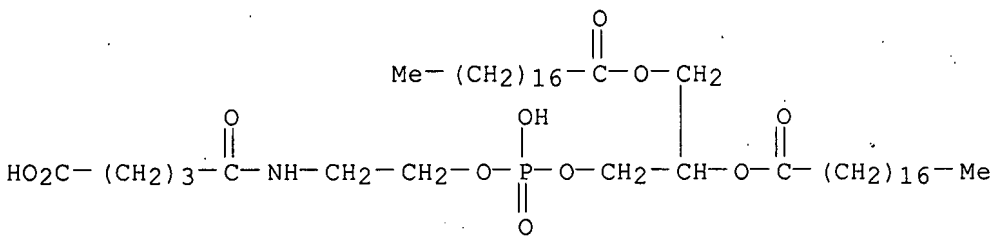
IT 184904-19-6
RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(multiplex detection probes for microarray assays)

RN 184904-19-6 CAPLUS
CN 9,11,15-Trioxa-6-aza-10-phosphahentriacontanoic acid, 10-hydroxy-5,16-dioxo-13-[(1-oxohexadecyl)oxy]-, 10-oxide, (13R)- (CA INDEX NAME)

Absolute stereochemistry.



L13 ANSWER 6 OF 21 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2005:485804 CAPLUS
DN 144:156314
TI Preparation of cationic liposomes modified by polyethylenimine and their application as gene carrier
AU Seo, Dong Hoan; Shin, Byung Cheol; Kim, Moon Suk
CS Nanobiomaterials Laboratory, Korea Research Institute of Chemical Technology, Yuseong, Daejeon, 305-606, S. Korea
SO Polymer (Korea) (2005), 29(3), 277-281
CODEN: POLLDG; ISSN: 0379-153X
PB Polymer Society of Korea
DT Journal
LA Korean
AB In this work, we prepared the lipid with polyethylenimine (PEI) to investigate the possibility as effective DNA carrier. Cationic lipid (PEI-DSPE) was synthesized by the reaction of PEI and 1,2-diacyl-sn-glycero-3-phosphoethanolamine (DSPE). The liposomes were prepared by the concentration changes of PEI-DSPE for a mixture of 1,2-distearoyl-sn-glycero-3-phosphocholine (DSPC), L-α-phosphatidylcholine, hydrogenated (HSPC) and cholesterol (CHOL). Particle size decreased as PEI-DSPE concentration increased. In addition, the charge of liposome surface increased to pos. value according to increasing the relative of PEI-DSPE concentration The complexation of DNA was confirmed by gel retardation assay and fluorescence measurement. The surface charge of liposome/DNA complexes increased as the liposome concentration or surface charge of liposome increased.
In conclusion, we confirmed that the prepared liposomes have the possibility as a DNA carrier.
IT 150150-68-8D, reaction products with polyethylenimine
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(preparation of cationic liposomes modified by polyethylenimine and their application as gene carrier)
RN 150150-68-8 CAPLUS
CN 9,11,15-Trioxa-6-aza-10-phosphatritriacontanoic acid, 10-hydroxy-5,16-dioxo-13-[(1-oxooctadecyl)oxy]-, 10-oxide (9CI) (CA INDEX NAME)



L13 ANSWER 7 OF 21 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2004:799592 CAPLUS
DN 141:320053
TI Phospholipid derivatives for liposome compositions
IN Itoh, Chika; Ohhashi, Syunsuke; Kubo, Kazuhiro; Yasukohchi, Tohru; Kikuchi, Hiroshi; Suzuki, Norio; Kurosawa, Miho; Yamauchi, Hitoshi
PA NOF Corporation, Japan; Daiichi Pharmaceutical Co. Ltd.
SO PCT Int. Appl., 39 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004083219	A1	20040930	WO 2004-JP3789	20040319
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	US 2007031481	A1	20070208	US 2006-549630	20060817
PRAI	JP 2003-77242	A	20030320		
	WO 2004-JP3789	W	20040319		

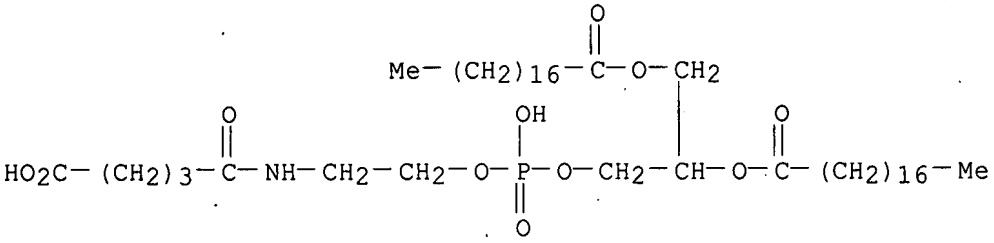
AB A phospholipid derivative represented by the formula R1COCH2CH(OCR2)CH2OP(OX)O2CH2CH2NHCO(CH2)a(CO)bO(A1O)m(A2O)n(A3O)qR3 (R1CO, R2CO = acyl; R3 = H, hydrocarbon; a = 0-4; b = 0-1, provided that when a is 0, then b is 0; X = H, alkali metal, ammonium, organic ammonium; A1O, A2O, and A3O = oxyalkylene, provided that the proportion of oxyethylene in A1O and A3O is 0.5 or higher by weight; and m, n, and q each indicates the average number of moles added, provided that $5 \leq m \leq 600$, $1 \leq n \leq 45$, $0 \leq q \leq 200$, $10 \leq m + n + q \leq 600$, $0.04 \leq n/(m + n + q)$, and $q/(m + n + q) \leq 0.8$). The derivative, on the surface of a liposome, is inhibited from spreading its polyalkylene oxide structure and thus serves to increase the amount of the hydrated layer on the surface and thereby heighten the stability of the liposome. A phospholipid compound monomethyl polyoxypropylene-polyoxyethylenesuccinyl distearoylphosphatidylethanolamine was prepared The phospholipid 1.04 mM was mixed with hydrogenated soybean phosphatidylcholine (HSPC) 11.28 cholesterol 7.68 mM, and doxorubicin solution q.s. to form a liposome with an average particle size of 95 nm.

IT 766509-41-5P, Monomethyl polyoxypropylene-polyoxyethylene glutaryldistearoylphosphatidylethanolamine
RL: COS (Cosmetic use); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(phospholipid derivs. for liposome compns.)

RN 766509-41-5 CAPLUS
CN Oxirane, methyl-, polymer with oxirane, mono[10-hydroxy-10-oxido-5,16-dioxo-13-[(1-oxooctadecyl)oxy]-9,11,15-trioxa-6-aza-10-phosphatritriacontanoate], methyl ether (9CI) (CA INDEX NAME)

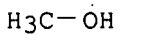
CM 1

CRN 150150-68-8
CMF C46 H88 N O11 P



CM 2

CRN 67-56-1
CMF C H4 O

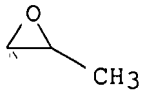


CM 3

CRN 9003-11-6
CMF (C3 H6 O . C2 H4 O)x
CCI PMS

CM 4

CRN 75-56-9
CMF C3 H6 O



CM 5

CRN 75-21-8
CMF C2 H4 O

L13 ANSWER 8 OF 21 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2004:633410 CAPLUS
DN 141:179562
TI Multivalent constructs for therapeutic and diagnostic applications
IN Arbogast, Christophe; Bussat, Philippe; Dransfield, Daniel T.; Fan, Hong; Linder, Karen; Marinelli, Edmund R.; Nanjappan, Palaniappa; Nunn, Adrian; Pillai, Radhakrishna; Pochon, Sybille; Ramalingam, Kondareddiar; Sato, Aaron; Shrivastava, Ajay; Song, Bo; Swenson, Rolf E.; Von Wronski, Mathew A.; Walker, Sharon Michele
PA Bracco International B. V., Neth.; Dyax Corporation
SO PCT Int. Appl., 320 pp.
CODEN: PIXXD2
DT Patent

LA English
FAN.CNT 3

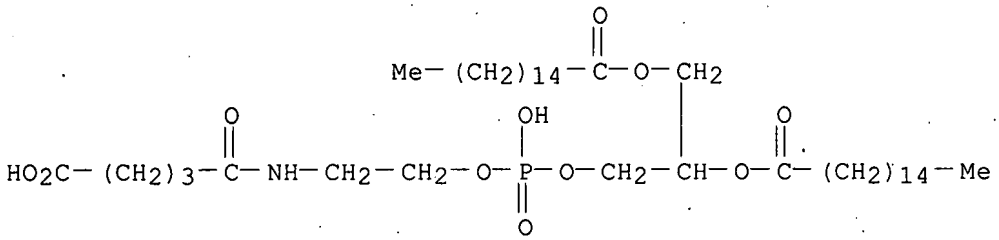
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004064595	A2	20040805	WO 2003-US28838	20030911
	WO 2004064595	A3	20050331		
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	US 2004018974	A1	20040129	US 2003-379287	20030303
	US 7211240	B2	20070501		
	CA 2512780	A1	20040805	CA 2003-2512780	20030911
	AU 2003276884	A1	20040813	AU 2003-276884	20030911
	EP 1587523	A2	20051026	EP 2003-815479	20030911
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
PRAI	US 2003-440201P	P	20030115		
	US 2003-379287	A	20030303		
	US 2002-360821P	P	20020301		
	WO 2003-US28838	W	20030911		

AB The invention features multivalent constructs using small targeting moieties which bind to different sites of the same target allowing for improved localization to the desired target and providing improved means for detecting, imaging and/or treating the target site. These targeting constructs may be linked or conjugated to a detectable label and/or a therapeutic agent and used to deliver the detectable label and/or therapeutic agent to the target of interest. The target may be a receptor involved in angiogenesis, hyperproliferative disorders or wound healing. Among examples provided are human carcinoma cell growth inhibition by an antiangiogenic heterodimeric peptide binding to VEGF receptor 2 (KDR), and ultrasound imaging using microbubbles derivatized with a KDR-binding heterodimer.

IT 123689-62-3D, derivs.
RL: DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(multivalent constructs for therapeutic and diagnostic applications)

RN 123689-62-3 CAPLUS

CN 9,11,15-Trioxa-6-aza-10-phosphahentriacontanoic acid, 10-hydroxy-5,16-dioxo-13-[(1-oxohexadecyl)oxy]-, 10-oxide (9CI) (CA INDEX NAME)



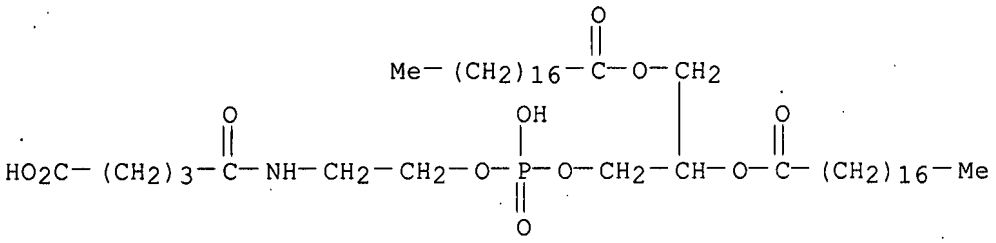
L13 ANSWER 9 OF 21 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2004:610131 CAPLUS
DN 141:162358
TI Conjugate for retention in blood and cancer tissue-specific drug delivery
IN Maeda, Atsushi; Takagi, Akira; Saito, Katsumi; Yamashita, Noboru;

Yoshioka, Tatsunobu
PA Yamanouchi Pharmaceutical Co., Ltd., Japan
SO PCT Int. Appl., 77 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2004063216	A1	20040729	WO 2004-JP104	20040109
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ				
US 2005054026	A1	20050310	US 2004-754341	20040109
US 7169892	B2	20070130		
EP 1591450	A1	20051102	EP 2004-701116	20040109
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
PRAI US 2003-439560P	P	20030110		
WO 2004-JP104	W	20040109		

AB Disclosed are a conjugate of a lipid, a peptide serving as the substrate of an enzyme secreted from cells of mammals including humans and a water-soluble polymer, which is usable as a colloidal carrier in a tissue-specific drug delivery system, etc.; a process for producing the conjugate; a peptide/water-soluble polymer conjugate optionally having a protective group which is useful as an intermediate of the conjugate; a colloidal carrier comprising the conjugate; and a tissue-specific drug delivery system using the colloidal carrier. Thus, distearoylphosphatidylethanolamine-glutaryl-Gly-Pro-Gln-Gly-Ile-Ala-Gly-Trp-Gly-amidopropyl polyoxyethylene Me ether was prepared for making liposome composition The blood retention property and cancer-targeting property of the liposome was examined in mice.

IT 150150-68-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of conjugate for retention in blood and cancer tissue-specific drug delivery containing lipids, water-soluble polymers, and peptides serving as substrates of specified enzymes)
RN 150150-68-8 CAPLUS
CN 9,11,15-Trioxa-6-aza-10-phosphatritriacontanoic acid, 10-hydroxy-5,16-dioxo-13-[(1-oxooctadecyl)oxy]-, 10-oxide (9CI) (CA INDEX NAME)

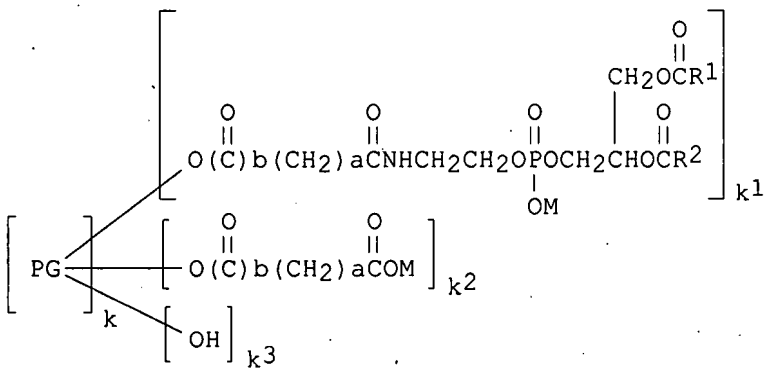


L13 ANSWER 10 OF 21 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2004:589555 CAPLUS
DN 141:142211
TI Phospholipid derivatives used for surfactants, solubilizers, dispersants in cosmetics and lipid membranes and their preparation
IN Kubo, Kazuhiro; Itoh, Chika; Ohhashi, Syunsuke; Yasukohchi, Tohru; Ohkawa, Yusuke; Kikuchi, Hiroshi; Suzuki, Norio; Kurosawa, Miho; Yamauchi, Hitoshi

PA NOF Corporation, Japan; Daiichi Pharmaceutical Co., Ltd.
SO PCT Int. Appl., 52 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2004060899	A1	20040722	WO 2003-JP15969	20031212
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2513144	A1	20040722	CA 2003-2513144	20031212
AU 2003289070	A1	20040729	AU 2003-289070	20031212
EP 1591447	A1	20051102	EP 2003-778894	20031212
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
CN 1735624	A	20060215	CN 2003-80108368	20031212
US 2006210618	A1	20060921	US 2005-541309	20050705
PRAI JP 2003-330	A	20030106		
WO 2003-JP15969	W	20031212		

GI



I

AB The phospholipid derivs. I ([PG]k = residue of a polyglycerol having d.p. k; k = 2-50; R1CO, R2CO = C8-22 acyl; a = 0-5; b = 0-1; M = H, alkali metal, ammonium or organic ammonium; and k1, k2, k3 = nos. satisfying the relationships: $1 \leq k1 \leq (k + 2)/2$, $0 \leq k2$, and $k1 + k2 + k3 = k + 2$). The derivs. are highly safe for the living body and can be favorably utilized in drug delivery systems such as liposome.

IT 725724-24-3P 725724-25-4P 725724-26-5P
725724-32-3P
RL: BUU (Biological use, unclassified); COS (Cosmetic use); IMF (Industrial manufacture); TEM (Technical or engineered material use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of phospholipid derivs. used for surfactants, solubilizers, dispersants in cosmetics and lipid membranes)

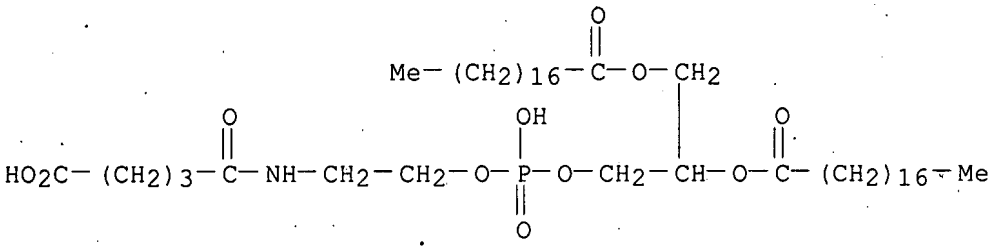
RN 725724-24-3 CAPLUS

CN 9,11,15-Trioxa-6-aza-10-phosphatritriacontanoic acid, 10-hydroxy-5,16-

dioxo-13-[(1-oxooctadecyl)oxy]-, 10-oxide, ester with hexaglycerol (9CI) (CA INDEX NAME)

CM 1

CRN 150150-68-8
CMF C46 H88 N O11 P



CM 2

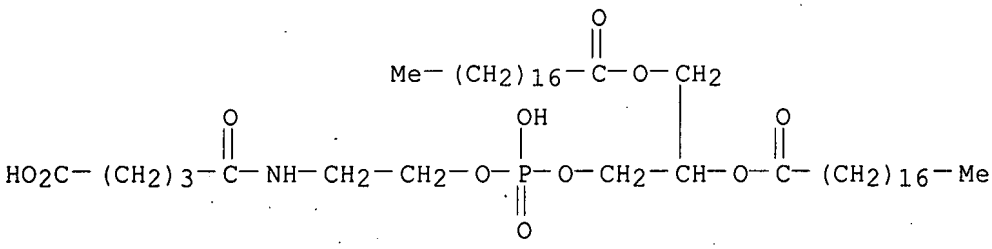
CRN 36675-34-0
CMF C18 H38 O13
CCI IDS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 725724-25-4 CAPLUS
CN 9,11,15-Trioxa-6-aza-10-phosphatritriacontanoic acid, 10-hydroxy-5,16-dioxo-13-[(1-oxooctadecyl)oxy]-, 10-oxide, ester with octaglycerol (9CI) (CA INDEX NAME)

CM 1

CRN 150150-68-8
CMF C46 H88 N O11 P



CM 2

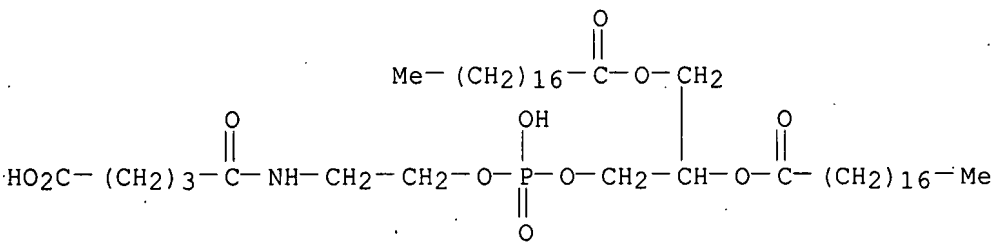
CRN 70103-30-9
CMF C24 H50 O17
CCI IDS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 725724-26-5 CAPLUS
CN 9,11,15-Trioxa-6-aza-10-phosphatritriacontanoic acid, 10-hydroxy-5,16-dioxo-13-[(1-oxooctadecyl)oxy]-, 10-oxide, ester with decaglycerol (9CI) (CA INDEX NAME)

CM 1

CRN 150150-68-8
CMF C46 H88 N O11 P



CM 2

CRN 9041-07-0
CMF C30 H62 O21
CCI IDS, MAN

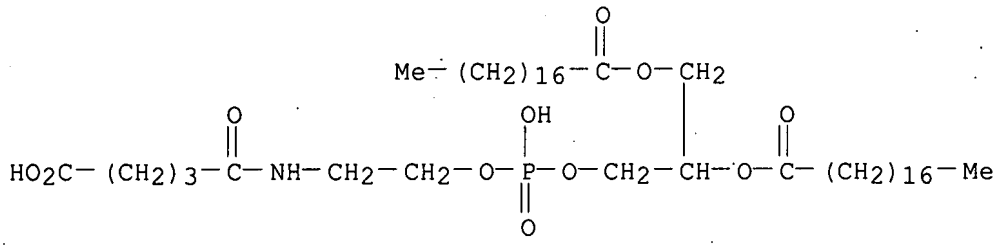
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 725724-32-3 CAPLUS

CN Butanedioic acid, ester with octaglycerol 10-hydroxy-5,16-dioxo-13-[(1-oxooctadecyl)oxy]-9,11,15-trioxa-6-aza-10-phosphatritriacontanoate 10-oxide (8:1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 150150-68-8
CMF C46 H88 N O11 P



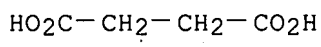
CM 2

CRN 70103-30-9
CMF C24 H50 O17
CCI IDS, MAN

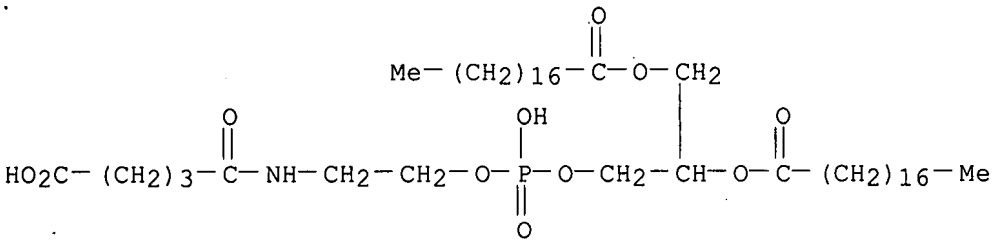
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

CRN 110-15-6
CMF C4 H6 O4



IT 150150-68-8P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(preparation of phospholipid derivs. used for surfactants, solubilizers, dispersants in cosmetics and lipid membranes)
RN 150150-68-8 CAPLUS
CN 9,11,15-Trioxa-6-aza-10-phosphatritriacontanoic acid, 10-hydroxy-5,16-dioxo-13-[(1-oxooctadecyl)oxy]-, 10-oxide (9CI) (CA INDEX NAME)



L13 ANSWER 11 OF 21 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2003:818316 CAPLUS
DN 139:328319
TI Multivalent constructs for therapeutic and diagnostic applications
IN Arbogast, Christophe; Bussat, Philippe; Dransfield, Daniel T.; Fan, Hang; Linder, Karen E.; Marinelli, Edmund R.; Nanjappan, Palaniappa; Nunn, Adrian; Pillai, Radhakrishna; Pochon, Sybille; Ramalingam, Kondareddiar; Sato, Aaron; Shrivastava, Ajay; Song, Bo; Swenson, Rolf E.; Von Wronski, Mathew A.; Walker, Sharon Michele
PA Bracco International BV, Neth.; Dyax Corp.
SO PCT Int. Appl., 278 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003084574	A1	20031016	WO 2003-US6656	20030303
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	CA 2477935	A1	20031016	CA 2003-2477935	20030303
	AU 2003228276	A1	20031020	AU 2003-228276	20030303
	EP 1482987	A1	20041208	EP 2003-726024	20030303
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	JP 2005519980	T	20050707	JP 2003-581813	20030303
PRAI	US 2002-360821P	P	20020301		
	US 2003-440201P	P	20030115		
	WO 2003-US6656	W	20030303		

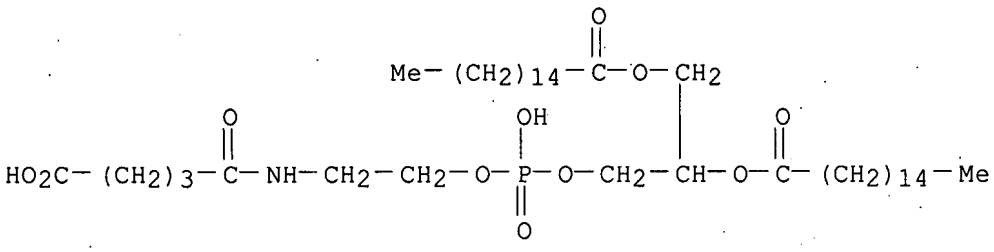
AB The invention features multivalent constructs using small targeting moieties which bind to different sites of the same target allowing for improved localization to the desired target and providing improved means for detecting, imaging and/or treating the target site. These targeting constructs may be linked or conjugated to a detectable label and/or a

therapeutic agent and used to deliver the detectable label and/or therapeutic agent to the target of interest. The target may be a receptor involved in angiogenesis, hyperproliferative disorders or wound healing. Among examples provided are human carcinoma cell growth inhibition by an antiangiogenic heterodimeric peptide binding to VEGF receptor 2 (KDR), and ultrasound imaging using microbubbles derivatized with a KDR-binding heterodimer.

IT 123689-62-3D, derivs.
RL: DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(multivalent constructs for therapeutic and diagnostic applications)

RN 123689-62-3 CAPLUS

CN 9,11,15-Trioxa-6-aza-10-phosphahentriacontanoic acid, 10-hydroxy-5,16-dioxo-13-[(1-oxohexadecyl)oxy]-, 10-oxide (9CI) (CA INDEX NAME)



RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 12 OF 21 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2003:796716 CAPLUS
DN 139:296564
TI Phospholipid derivatives for cosmetic and pharmaceutical uses
IN Itoh, Chika; Kubo, Kazuhiro; Ohhashi, Syunsuke; Yasukohchi, Tohru; Kikuchi, Hiroshi; Suzuki, Norio; Kurosawa, Miho; Yamauchi, Hitoshi
PA NOF Corporation, Japan; Daiichi Pharmaceutical Co., Ltd.
SO PCT Int. Appl., 47 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003082882	A1	20031009	WO 2003-JP3966	20030328
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2003220917	A1	20031013	AU 2003-220917	20030328
	EP 1498420	A1	20050119	EP 2003-715589	20030328
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	US 2005220856	A1	20051006	US 2005-508704	20050525
PRAI	JP 2002-93694	A	20020329		
	WO 2003-JP3966	W	20030328		

AB Disclosed is a phospholipid derivative which is highly safe for the living body and is suitable for use in solubilizing or dispersing a physiol.

active substance, etc. or in the field of drug delivery systems, e.g., a liposome, or cosmetics. The phospholipids comprise polyalkylene oxide groups. For example, polyoxyethylene pentaerythritol ether glutaryl-mono(distearoylphosphatidylethanolamine succinate) was prepared and used as a solubilizer in formulating lotions.

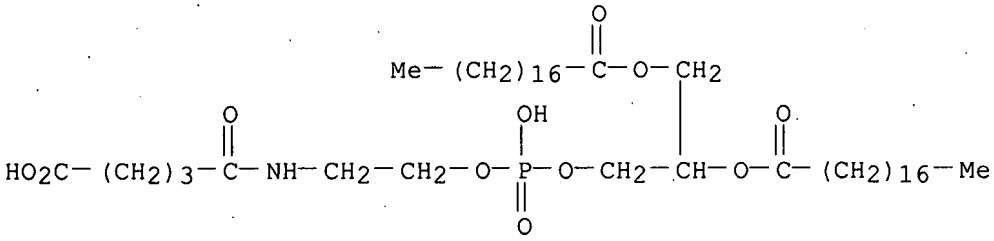
IT 609844-35-1P
RL: COS (Cosmetic use); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of phospholipid derivs. for cosmetic and pharmaceutical uses)

RN 609844-35-1 CAPLUS

CN Poly(oxy-1,2-ethanediyl), α-hydro-ω-hydroxy-, ether with oxybis[propanol] (4:1), mono(10-hydroxy-5,16-dioxo-13-[(1-oxooctadecyl)oxy]-9,11,15-trioxa-6-aza-10-phosphatritriacontanoate 10-oxide) (9CI) (CA INDEX NAME)

CM 1

CRN 150150-68-8
CMF C46 H88 N O11 P



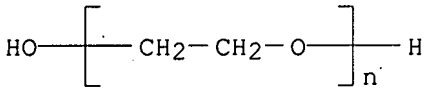
CM 2

CRN 59113-36-9
CMF C6 H14 O5
CCI IDS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

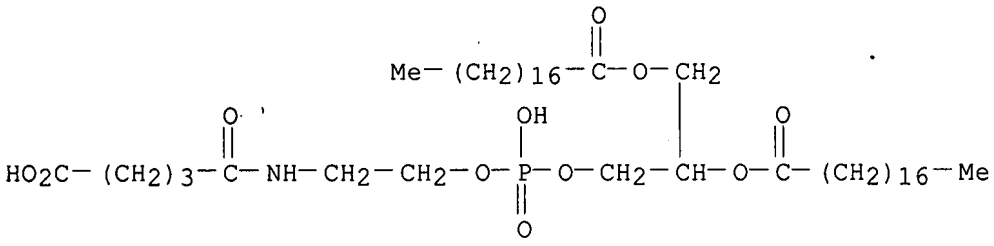
CRN 25322-68-3
CMF (C2 H4 O)n H2 O
CCI PMS



IT 150150-68-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of phospholipid derivs. for cosmetic and pharmaceutical uses)

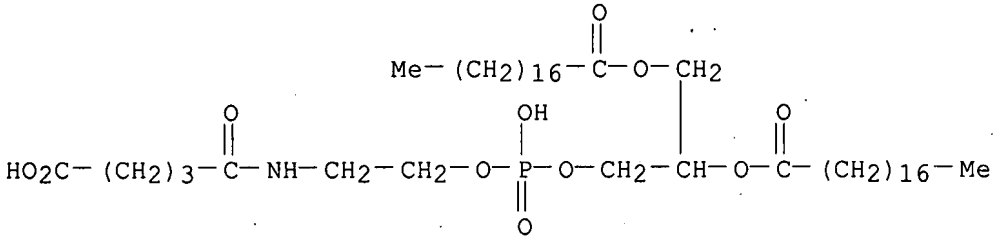
RN 150150-68-8 CAPLUS

CN 9,11,15-Trioxa-6-aza-10-phosphatritriacontanoic acid, 10-hydroxy-5,16-dioxo-13-[(1-oxooctadecyl)oxy]-, 10-oxide (9CI) (CA INDEX NAME)



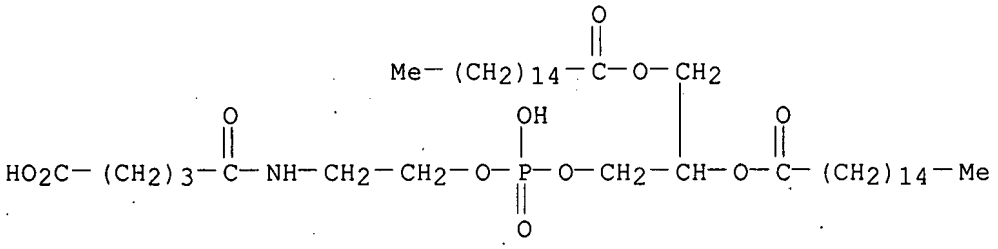
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 13 OF 21 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2001:549174 CAPLUS
DN 136:107385
TI Liposomes bearing polyethyleneglycol-coupled transferrin with intracellular targeting property to the solid tumors in vivo
AU Ishida, Osamu; Maruyama, Kazuo; Tanahashi, Hiroyuki; Iwatsuru, Motoharu; Sasaki, Katsunori; Eriguchi, Masazumi; Yanagie, Hironobu
CS Faculty of Pharmaceutical Sciences, Teikyo University, Kanagawa, 199-0195, Japan
SO Pharmaceutical Research (2001), 18(7), 1042-1048
CODEN: PHREEB; ISSN: 0724-8741
PB Kluwer Academic/Plenum Publishers
DT Journal
LA English
AB The purpose of this study was to determine the usefulness of transferrin (TF)-pendant-type polyethyleneglycol (PEG)-liposomes (TF-PEG-liposomes), in which TF was covalently linked to the distal terminal of PEG chains on the external surface of PEG-liposomes as a carrier for in vivo cytoplasmic targeting to tumor cells. Small unilamellar TF-PEG-liposomes (100-140 nm in diameter) were prepared from DSPC, CH, DSPE-PEG, and DSPE-PEG-COOH (2:1:0.11:0.021, molar ratio), and were conjugated to TF via the carboxyl residue of DSPE-PEG-COOH. The intracellular targeting ability of TF-PEG-liposomes to tumor cells was examined in vitro and in Colon 26 tumor-bearing mice. TF-PEG-liposomes, bearing approx. 25 TF mols. per liposome, readily bound to mouse Colon 26 cells in vitro and were internalized by receptor-mediated endocytosis. TF-PEG-liposomes showed a prolonged residence time in the circulation and low RES uptake in Colon 26 tumor-bearing mice, resulting in enhanced extravasation of the liposomes into the solid tumor tissue. Electron microscopic studies in Colon 26 tumor-bearing mice revealed that the extravasated TF-PEG-liposomes were internalized into tumor cells by receptor-mediated endocytosis. TF-PEG-liposomes had the capabilities of specific receptor binding and receptor-mediated endocytosis to target cells after extravasation into solid tumors in vivo. Such liposomes should be useful for in vivo cytoplasmic targeting of chemotherapeutic agents or plasmid DNAs to target cells.
IT 150150-68-8P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(liposomes bearing PEG-coupled transferrin with intracellular targeting property to solid tumors in vivo)
RN 150150-68-8 CAPLUS
CN 9,11,15-Trioxa-6-aza-10-phosphatritriacontanoic acid, 10-hydroxy-5,16-dioxo-13-[(1-oxooctadecyl)oxy]-, 10-oxide (9CI) (CA INDEX NAME)



RE.CNT 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 14 OF 21 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2001:470561 CAPLUS
DN 136:221629
TI Synthesis of RGD containing peptides. Comparative study of their incorporation to the surface of 5-fluorouridine loaded liposomes
AU Massaguer, A.; Haro, I.; Alsina, M. A.; Reig, F.
CS Department of Peptide and Protein Chemistry, IIQAB.CSIC, Barcelona, 08034, Spain
SO Journal of Liposome Research (2001), 11(1), 103-113
CODEN: JLREE7; ISSN: 0898-2104
PB Marcel Dekker, Inc.
DT Journal
LA English
AB The synthesis on solid phase of a peptide sequence (GGRGRS) related to an integrin adhesion site as well as the preparation of some hydrophobic derivs. is described. The incorporation of these peptides to the surface of liposomes was carried out either through the NGPE (N-glutaryl dipalmitoyl phosphatidylcholine) carboxyl-group or mixing hydrophobic peptide derivs. with lipids since the beginning of the process. The influence of these factors on the entrapment yield of 5-FUR (5-fluorouridine) was determined Best results, calculated as percentage of drug encapsulation, were obtained when the peptide was linked to preformed liposomes via an NGPE-amide bond. On the contrary, the presence of these hydrophobic peptides on the bilayers decreases the overall yield of encapsulation of 5-FUR. Nevertheless, considering drug/lipid relationship and scaling-up requirements it seems that the use of myristoyl peptide derivative should be the procedure of choice. Physicochem. studies carried out with the peptides indicated that the presence of hydrophobic moieties linked to the parent peptide increases the tendency to self aggregation, as detected through fluorescence studies using DPH (1,6-di-Ph hexatriene) as marker, reducing in this way the efficiency of incorporation of hydrophobic peptides to the surface of liposomes.
IT 123689-62-3P
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of RGD-containing peptides and their incorporation to surface of
5-fluoruridine-loaded liposomes)
RN 123689-62-3 CAPLUS
CN 9,11,15-Trioxa-6-aza-10-phosphahentriacontanoic acid, 10-hydroxy-5,16-dioxo-13-[(1-oxohexadecyl)oxy]-, 10-oxide (9CI) (CA INDEX NAME)



RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

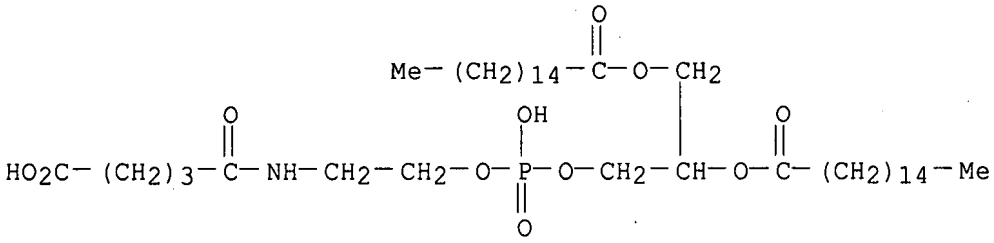
L13 ANSWER 15 OF 21 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2000:865087 CAPLUS
DN 134:21485
TI Liposome vector complexes for gene therapy
IN Bruesselbach, Sabine; Mueller, Kristina; Fahr, Alfred
PA Aventis Pharma Deutschland G.m.b.H., Germany
SO Ger. Offen., 14 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 19925143	A1	20001207	DE 1999-19925143	19990602
	CA 2375854	A1	20001214	CA 2000-2375854	20000523
	WO 2000074646	A2	20001214	WO 2000-EP4678	20000523
	WO 2000074646	A3	20010809		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	EP 1187929	A2	20020320	EP 2000-929548	20000523
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	JP 2003501373	T	20030114	JP 2001-501183	20000523
PRAI	DE 1999-19925143	A	19990602		
	WO 2000-EP4678	W	20000523		

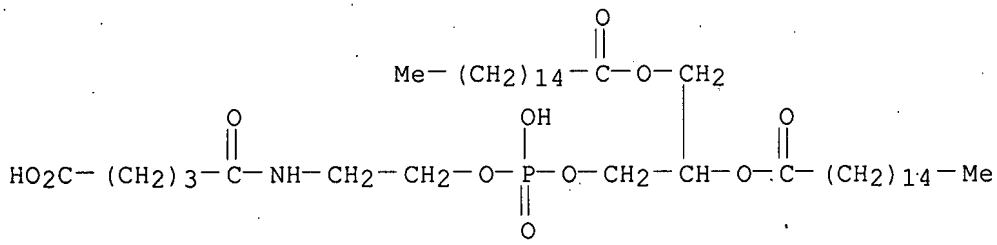
AB The invention refers to a new liposome carrier complex, containing the following components: (A) a nucleic acid sequence of arbitrary length; (B) a cationic carrier, (C) lipids and phospholipids and (D) optionally a ligand, and (E) optionally a functional sequence from the subunit HA-2 hemagglutinins of the influenza virus. Human umbilical cord endothelial cells, which were incubated with the liposomes, showed a clear expression of cDNA.

IT 123689-62-3P
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(liposome vector complexes for gene therapy)

RN 123689-62-3 CAPLUS
CN 9,11,15-Trioxa-6-aza-10-phosphahentriacontanoic acid, 10-hydroxy-5,16-dioxo-13-[(1-oxohexadecyl)oxy]-, 10-oxide (9CI) (CA INDEX NAME)



L13 ANSWER 16 OF 21 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1997:601246 CAPLUS
DN 127:298616
TI Enhancement of the in vivo circulation lifetime of L-α-distearoylphosphatidylcholine liposomes: importance of liposomal aggregation versus complement opsonization
AU Ahl, Patrick L.; Bhatia, Suresh K.; Meers, Paul; Roberts, Patricia; Stevens, Rachel; Dause, Richard; Perkins, Walter R.; Janoff, Andrew S.
CS The Liposome Company, Inc., Princeton Forrestal Center, One Research Way, Princeton, NJ, 08540-6619, USA
SO Biochimica et Biophysica Acta, Biomembranes (1997), 1329(2), 370-382
CODEN: BBBMBS; ISSN: 0005-2736
PB Elsevier B.V.
DT Journal
LA English
AB Incorporation of N-(ω-carboxy)acylamido-phosphatidylethanolamines (-PEs) into large unilamellar vesicles (LUVs) of L-α-distearoylphosphatidylcholine (DSPC) was found to dramatically increase the in vivo liposomal circulation lifetime in rats, reaching a maximal effect at 10 mol.% of the total phospholipid. Neither pure DSPC liposomes nor those with the longest circulating derivative, N-glutaryl-dipalmitoylphosphatidylethanolamine (-DPPE), were found to significantly bind complement from serum. Therefore, the relatively short circulation time of pure DSPC liposomes did not appear to be related to greater complement opsonization leading to uptake by the reticuloendothelial system. However, N-(ω-carboxy)acylamido-PEs were particularly efficient inhibitors of a limited aggregation detected for pure DSPC liposomes. The aggregation tendency of DSPC liposomes incorporating various structural analogs of N-glutaryl-DPPE correlated inversely with the circulation lifetimes. Therefore, it is concluded that such PE derivs. enhance the circulation time by preventing liposomal aggregation and avoiding a poorly understood mechanism of clearance that is dependent on size but is independent of complement opsonization. At high concns. of N-glutaryl-DPPE (above 10 mol.%), the liposomes exhibited strong complement opsonization and were cleared from circulation rapidly, as were other highly neg. charged liposomes. These data demonstrate that both the lack of opsonization and the lack of a tendency to aggregate are required for long circulation. Liposomal disaggregation via N-(ω-carboxy)acylamido-PEs yields a new class of large unilamellar DSPC liposomes with circulation lifetimes that are comparable to those of sterically stabilized liposomes.
IT 123689-62-3P
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
(liposomal aggregation vs. complement opsonization in enhancement of circulation lifetime of L-α-distearoylphosphatidylcholine liposomes)
RN 123689-62-3 CAPLUS
CN 9,11,15-Trioxa-6-aza-10-phosphahentriacontanoic acid, 10-hydroxy-5,16-dioxo-13-[(1-oxohexadecyl)oxy]-, 10-oxide (9CI) (CA INDEX NAME)



RE.CNT 68 THERE ARE 68 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

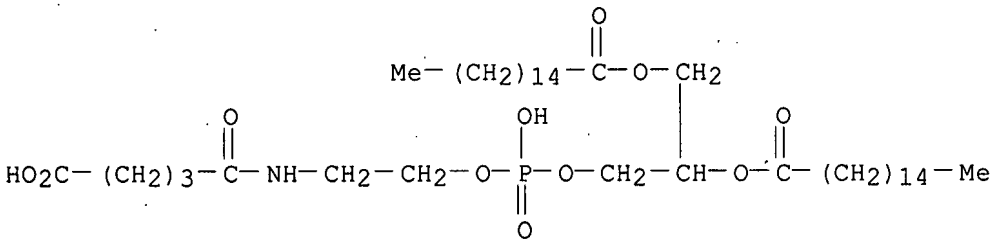
L13 ANSWER 17 OF 21 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1997:231302 CAPLUS
DN 126:282815
TI Reduction of liposome-induced adverse physiological reactions
IN Ahl, Patrick L.; Bhatia, Suresh K.; Minchey, Sharma R.; Janoff, Andrew S.
PA Liposome Co., Inc., USA
SO U.S., 29 pp., Cont.-in-part of U.S. Ser. No. 207,651, abandoned.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5614214	A	19970325	US 1994-247053	19940520
	CA 2160118	A1	19941208	CA 1994-2160118	19940520
	EP 1118326	A2	20010725	EP 2001-100692	19940520
	EP 1118326	A3	20020731		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE				
	ES 2165875	T3	20020401	ES 1994-918106	19940520
	PT 699068	T	20020628	PT 1994-918106	19940520
	US 5662930	A	19970902	US 1995-433665	19950504
PRAI	US 1993-65928	B2	19930521		
	US 1994-207651	B2	19940307		
	EP 1994-918106	A3	19940520		
	US 1994-247053	A3	19940520		

AB The blood pressure decrease associated with administering bioactive agent-containing liposomes to an animal is diminished by incorporation into the liposomes (diameter 200-5000 nm) of a phosphatidylethanolamine conjugated to a dicarboxylic acid in such amount that this conjugate comprises ≥10% of the liposome's bilayer. Thus, distearoylphosphatidylcholine liposomes were prepared which contained 5 mol% dipalmitoylphosphatidylethanolamine-glutaric acid conjugate.

IT 123689-62-3P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(reduction of liposome-induced adverse physiol. reactions)

RN 123689-62-3 CAPLUS
CN 9,11,15-Trioxa-6-aza-10-phosphahentriacontanoic acid, 10-hydroxy-5,16-dioxo-13-[(1-oxohexadecyl)oxy]-, 10-oxide (9CI) (CA INDEX NAME)



L13 ANSWER 18 OF 21 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1996:404755 CAPLUS
DN 125:67758
TI Ether lipid liposomes for cancer treatment
IN Mayhew, Eric; Janoff, Andrew S.; Ahmad, Imran; Bhatia, Suresh K.
PA Liposome Company, Inc., USA
SO PCT Int. Appl., 45 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 7

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9611670	A1	19960425	WO 1995-US12721	19951012
	W: AU, CA, FI, JP, KR, NO				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	CA 2199179	A1	19960425	CA 1995-2199179	19951012
	AU 9537625	A	19960506	AU 1995-37625	19951012
	AU 707414	B2	19990708		
	EP 785773	A1	19970730	EP 1995-935710	19951012
	EP 785773	B1	20010103		
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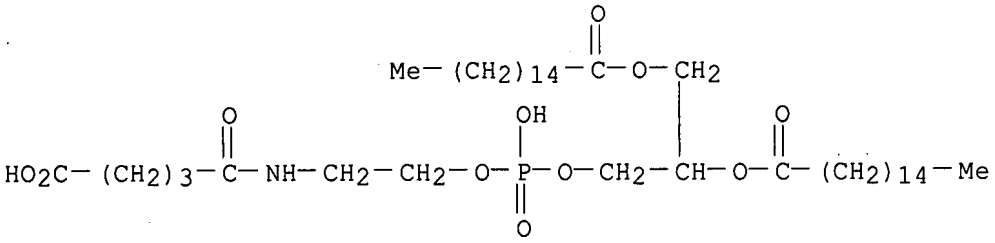
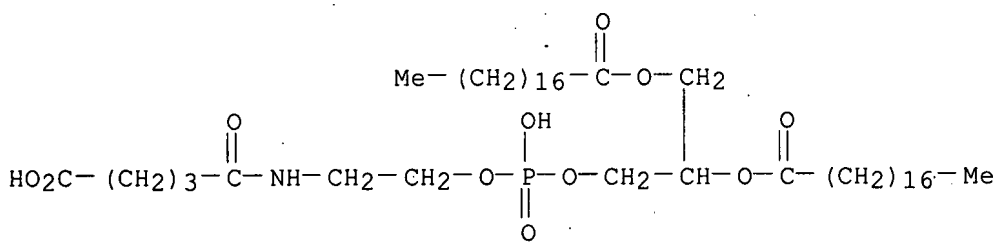
	JP 10507450	T	19980721	JP 1996-513281	19951012
	AT 198419	T	20010115	AT 1995-935710	19951012
	ES 2153053	T3	20010216	ES 1995-935710	19951012
	PT 785773	T	20010531	PT 1995-935710	19951012
	FI 9701494	A	19970410	FI 1997-1494	19970410
	NO 9701643	A	19970609	NO 1997-1643	19970410
	NO 316206	B1	20031229		
	GR 3035689	T3	20010731	GR 2001-400538	20010402
PRAI	US 1994-323042	A	19941014		
	WO 1995-US12721	W	19951012		

OS MARPAT 125:67758
AB Ether lipids R1OCH2CH(ZR2)CH2R3 [R1 = Y1Y2; Y1 = CH3, CO2H; Y2 = alkapolyenyl; Z = O, S; R2 = Y1Y2, (fluoro)alkyl; R3 = R5P(O)(OH)OR6; R5 = O, S, NH; R6 = CH2CH2N+Me3, CH2CH2NH2, CH2CH(OH)CH2OH, CH2CH2NHC(O)R7; R7 = Y2CH3, Y2CO2H] are incorporated into liposomes with a headgroup-derivatized lipid (e.g. a phosphatidylethanolamine-dicarboxylic acid) and optionally a sterol and a neutral lipid for treatment of cancer and inflammatory diseases. These liposomes have low hemolytic, hepatotoxic, and enterotoxic activities. Thus, the ether lipid, 1-O-octadecyl-2-O-methyl-sn-glycero-3-phosphocholine, incorporated into phosphatidylcholine/cholesterol/phosphatidylethanolamine-glutaric acid liposomes, inhibited growth of human A549 lung cancer cells in vitro and inhibited metastasis of Lewis lung cancer in mice.
IT 123689-62-3
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(ether lipid liposomes for cancer treatment)
RN 123689-62-3 CAPLUS
CN 9,11,15-Trioxa-6-aza-10-phosphahentriacontanoic acid, 10-hydroxy-5,16-dioxo-13-[(1-oxohexadecyl)oxy]-, 10-oxide (9CI) (CA INDEX NAME)



L13 ANSWER 19 OF 21 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1993:567584 CAPLUS
DN 119:167584
TI Specific targeting with polyethylene glycol-modified liposomes: coupling of homing devices to the ends of the polymeric chains combines effective target binding with long circulation times
AU Blume, G.; Cevc, G.; Crommelin, M. D. J. A.; Bakker-Woudenberg, I. A. J. M.; Kluft, C.; Storm, G.
CS Medizinische Biophysik, Urologische Klinik und Poliklinik der Technischen Universitaet Muenchen, Klinikum r.d.I., Munchen, Germany
SO Biochimica et Biophysica Acta, Biomembranes (1993), 1149(1), 180-4
CODEN: BBBMBS; ISSN: 0005-2736
PB Elsevier B.V.
DT Journal
LA English
AB One possibility for bringing drugs to their specific targets is to use the drug-laden liposomes that have been made target- specific by the attachment of appropriate proteins. Such 'directed' proteoliposomes and most other particles are rapidly removed from the bloodstream, however, by the mononuclear phagocytes in the liver and spleen. This causes suboptimal drug accumulation at the target site. Coating the liposome surface with polyethylene glycol (PEG) may prolong the circulation time of liposomes. Using plasminogen as a homing device the authors have shown that the PEG-modified liposomes with such a homing device coupled to the ends of the long PEG chains may combine long vesicle circulation times in the blood with high target binding capability. The PEG-coated proteoliposomes with homing devices attached at the very bilayer surface, on the contrary, are long-lived but have only little or no capability to bind to their targets.
IT 150150-68-8
RL: BIOL (Biological study).
(liposomes containing, PEG-modified, for target binding with long circulation time)
RN 150150-68-8 CAPLUS
CN 9,11,15-Trioxa-6-aza-10-phosphatritriacontanoic acid, 10-hydroxy-5,16-dioxo-13-[(1-oxooctadecyl)oxy]-, 10-oxide (9CI) (CA INDEX NAME)

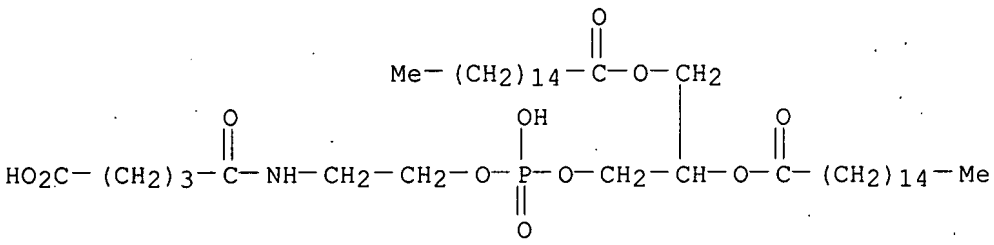


L13 ANSWER 20 OF 21 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1991:627813 CAPLUS
DN 115:227813
TI Carboxyacyl derivatives of phospholipid, and carbodiimide method for sensitizing liposome with antigen or antibody for liposome lysis immunoassay
IN Umeda, Mamoru; Kobayashi, Reiji
PA Nissui Seiyaku Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 03073856	A	19910328	JP 1989-209789	19890814
PRAI	JP 1989-209789		19890814		

AB Carboxyacyl derivs. of phospholipid are used to introduce antigen or antibody to the surface of liposome which encapsulates a hydrophilic label for liposome lysis immunoassay for diagnosing endocrine disease. With the liposome, the immunoassay is simple and sensitive, and is not influenced by complement interference, i.e. antigen-antibody complex formation-independent lysis. Thus, N-succinyl, glutamyl, adipoyl, pimeloyl, suberyl, sebacioyl, (11-carboxyimidecanoyl), and (13-carboxytridecanoyl) dipalmitoylphosphatidylethanolamine were prepared from dipalmitoyl phosphatidylethanolamine and succinic; glutaric; adipic; pimelic; suberic; sebacic; decadicarboxylic; and dodecanedicarboxylic anhydrides, and were used to link anti-C-reactive protein (CRP) IgG with liposome by adding ethyldimethylpropylaminocarbodiimide. The IgG sensitized liposome was then used for CRP determination in human blood.
IT 123689-62-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, for sensitizing liposome with antigen or antibody via carbodiimide, for preventing complement interference in liposome lysis immunoassay)
RN 123689-62-3 CAPLUS
CN 9,11,15-Trioxa-6-aza-10-phosphahentriacontanoic acid, 10-hydroxy-5,16-dioxo-13-[(1-oxohexadecyl)oxy]-, 10-oxide (9CI). (CA INDEX NAME)



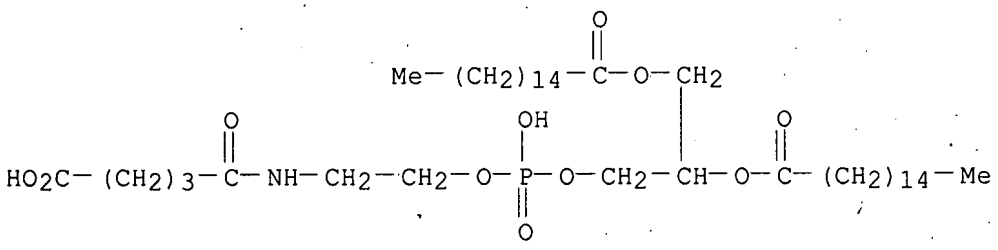
L13 ANSWER 21 OF 21 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1989:610777 CAPLUS
DN 111:210777
TI Interaction of erythrocyte plasma membranes with "gel" liposomes (neutral and negatively charged)
AU Bel'tser, N. V.; Anishchuk, M. G.; Bogdanov, A. A., Jr.; Torchilin, V. P.
CS A. V. Palladin Inst. Biochem., Kiev, USSR
SO Biologicheskie Membrany (1989), 6(9), 955-65
CODEN: BIMEE9; ISSN: 0233-4755
DT Journal
LA Russian
AB Interactions of human erythrocytes with gel-phase liposomes prepared from dipalmitoylphosphatidylcholine (DPPC) or from DPPC and

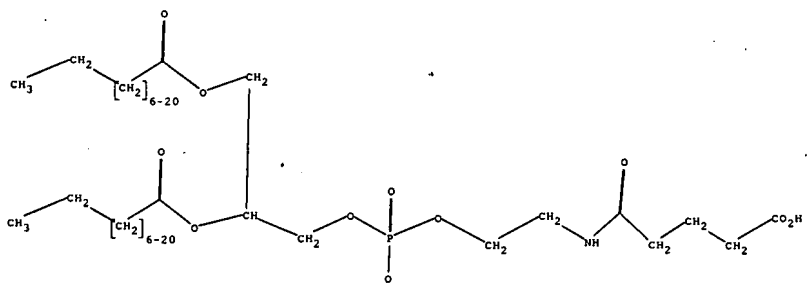
N-glutaryl-dipalmitoylphosphatidylethanolamine mixture (9:1 molar ratio) were studied by transmission electron microscopy. The data obtained suggest the following dynamics of liposome-erythrocyte membrane interactions: in contrast to neutral liposomes, neg. charged ones rapidly bind to the cell surface (in the presence of 2 mM CaCl2); their membranes immediately undergo destabilization concomitant with glycocalyx elimination from the areas of close contact between liposome and erythrocyte membranes. Then liposomal lipids incorporate into the cell membrane causing echinocytic shape transformations followed by particle release from the tips of spicules. The erythrocyte membrane and cytoskeletal proteins seem to play a major role in the liposome-cell interactions. Treatment of erythrocytes with crosslinking agents before incubation with liposomes does not prevent binding of liposomes to the cell surfaces but strongly inhibits further mixing (fusion) of lipid components of the contacting membranes.

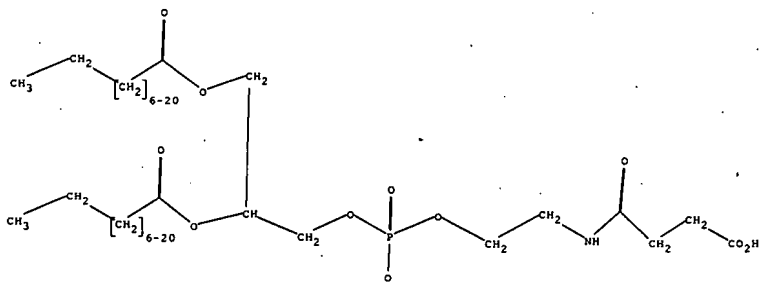
IT 123689-62-3
RL: BIOL (Biological study)
(liposomes containing, cell membrane of human erythrocytes interaction with gel-phase)

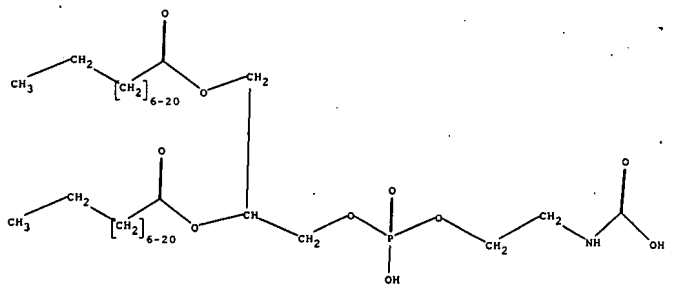
RN 123689-62-3 CAPLUS

CN 9,11,15-Trioxa-6-aza-10-phosphahentriacontanoic acid, 10-hydroxy-5,16-dioxo-13-[(1-oxohexadecyl)oxy]-, 10-oxide (9CI) (CA INDEX NAME)





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